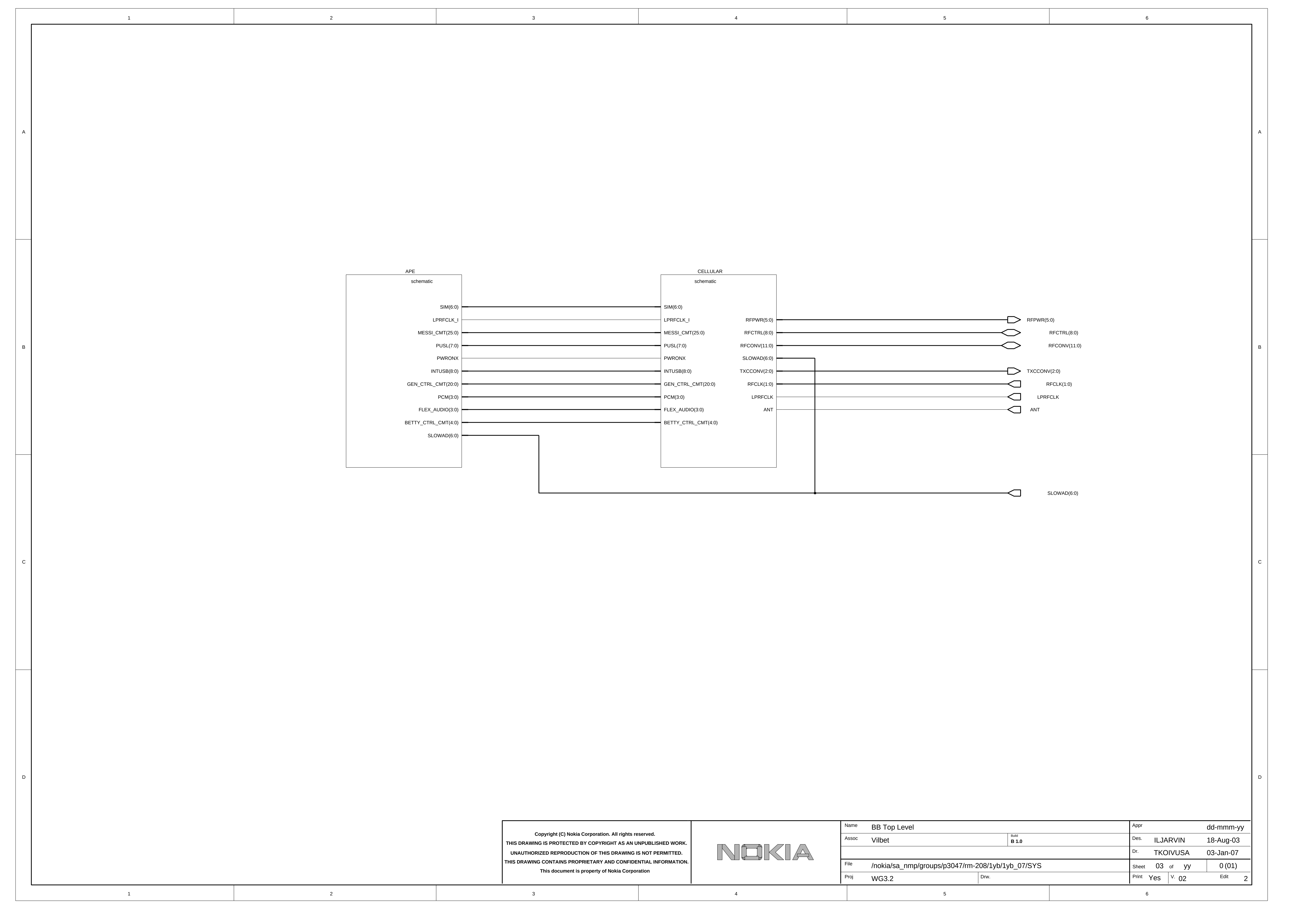
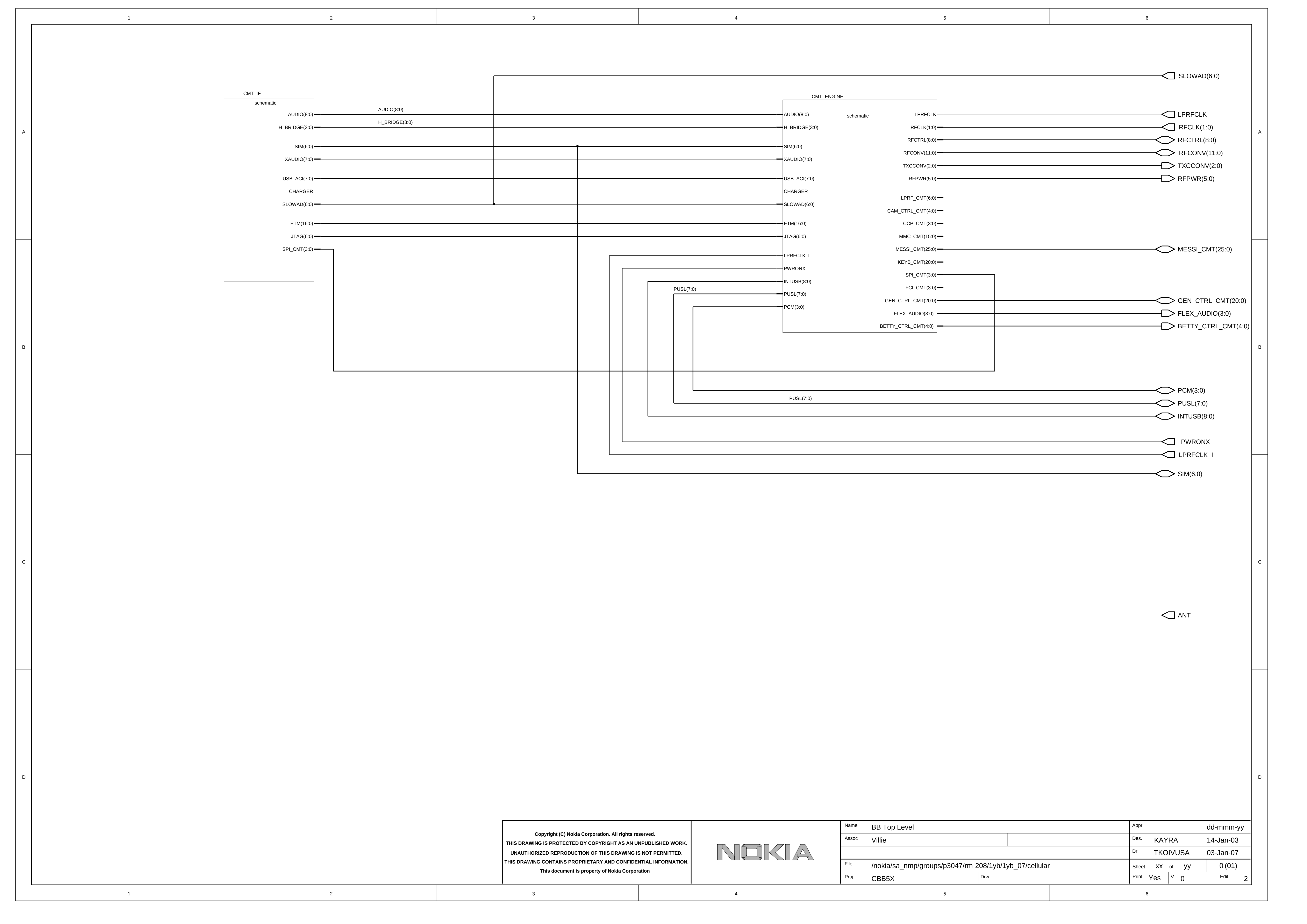
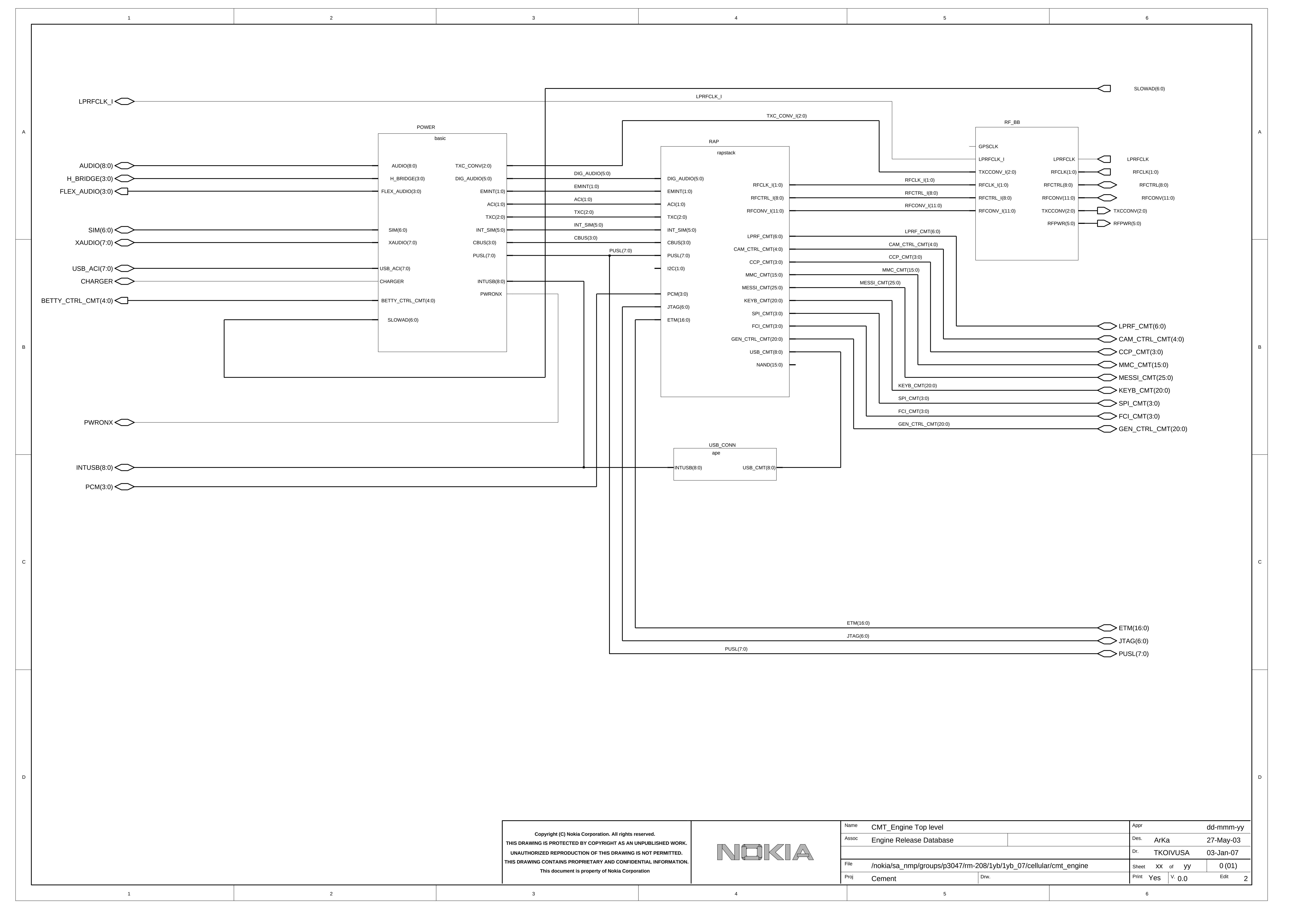
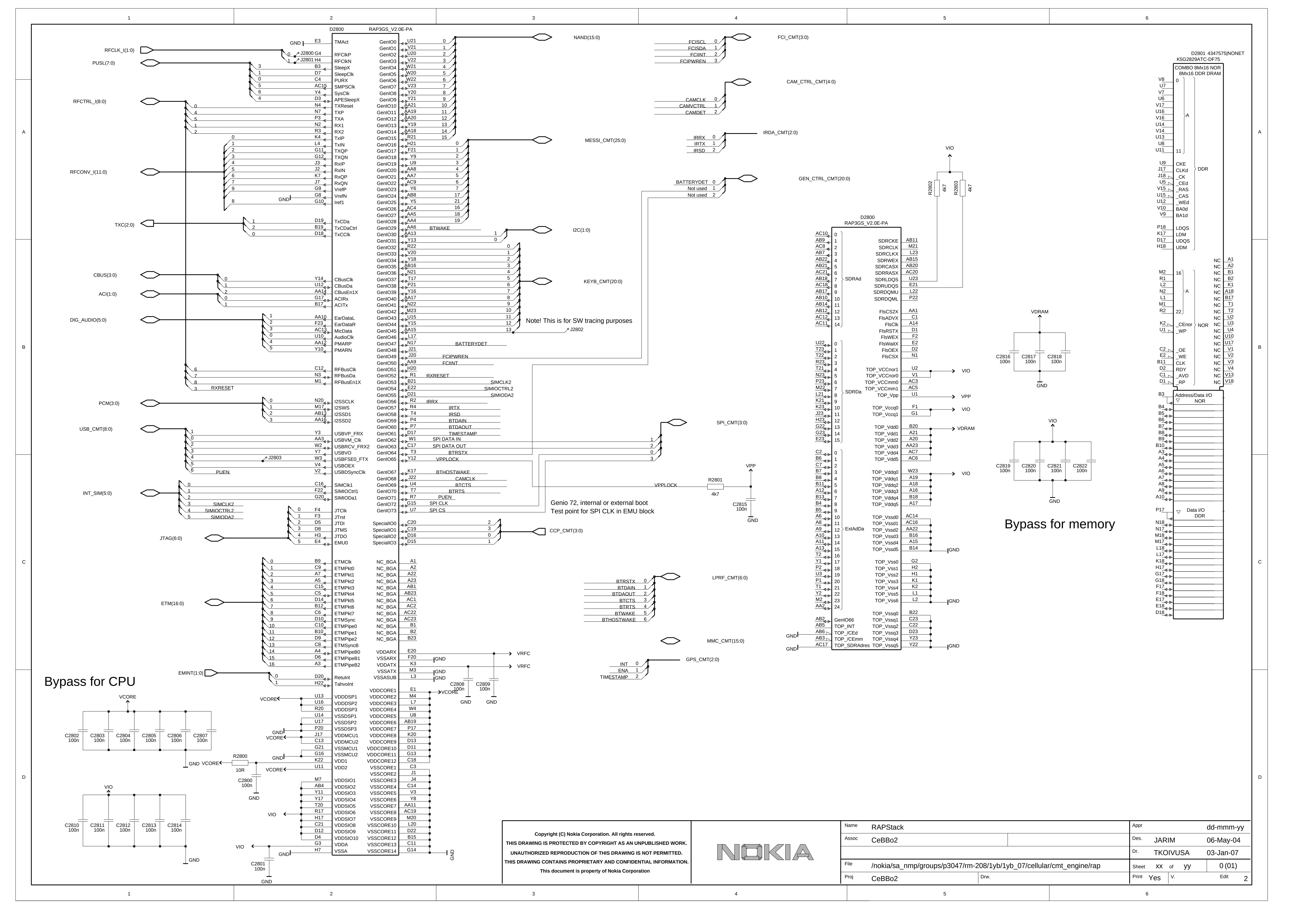

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6
A
B
C
D
APE
schematic
SIM(6:0)
LPRFCLK_I
MESSI_CMT(25:0)
PUSL(7:0)
PWRONX
INTUSB(8:0)
GEN_CTRL_CMT(20:0)
PCM(3:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
SLOWAD(6:0)
CELLULAR
schematic
SIM(6:0)
LPRFCLK_I
MESSI_CMT(25:0)
PUSL(7:0)
PWRONX
INTUSB(8:0)
GEN_CTRL_CMT(20:0)
PCM(3:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
RFPWR(5:0)
RFCTRL(8:0)
RFCONV(11:0)
SLOWAD(6:0)
TXCCONV(2:0)
RFCLK(1:0)
LPRFCLK
ANT
RFPWR(5:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFCLK(1:0)
LPRFCLK
ANT
SLOWAD(6:0)
NOKIA
Name BB Top Level
Assoc Vilbet
Build B 1.0
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/SYS
Proj WG3.2
Drw.
Appr dd-mmm-yy
Des. ILJARVIN 18-Aug-03
Dr. TKOIVUSA 03-Jan-07
Sheet 03 of yy 0 (01)
Print Yes V. 02 Edit 2

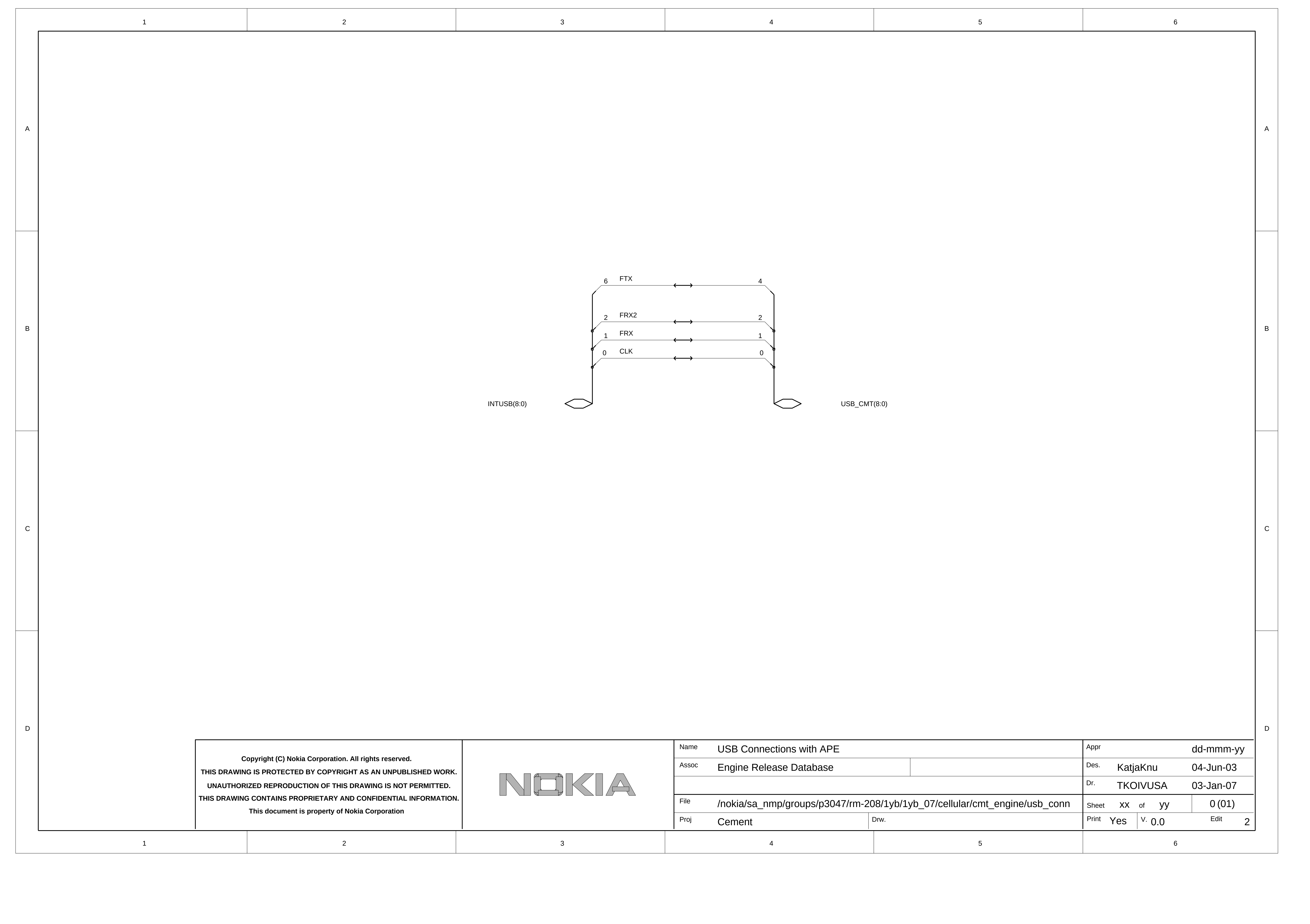


CMT_IF
schematic
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
ETM(16:0)
JTAG(6:0)
SPI_CMT(3:0)
AUDIO(8:0)
H_BRIDGE(3:0)
CMT_ENGINE
schematic
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
ETM(16:0)
JTAG(6:0)
LPRFCLK_I
PWRONX
INTUSB(8:0)
PUSL(7:0)
PCM(3:0)
LPRFCLK
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
LPRF_CMT(6:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
MMC_CMT(15:0)
MESSI_CMT(25:0)
KEYB_CMT(20:0)
SPI_CMT(3:0)
FCI_CMT(3:0)
GEN_CTRL_CMT(20:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
PUSL(7:0)
PUSL(7:0)
SLOWAD(6:0)
LPRFCLK
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
MESSI_CMT(25:0)
GEN_CTRL_CMT(20:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
PCM(3:0)
PUSL(7:0)
INTUSB(8:0)
PWRONX
LPRFCLK_I
SIM(6:0)
ANT
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NOKIA
Name BB Top Level
Assoc Villie
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular
Proj CBB5X
Drw.
Appr dd-mmm-yy
Des. KAYRA 14-Jan-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0 Edit 2

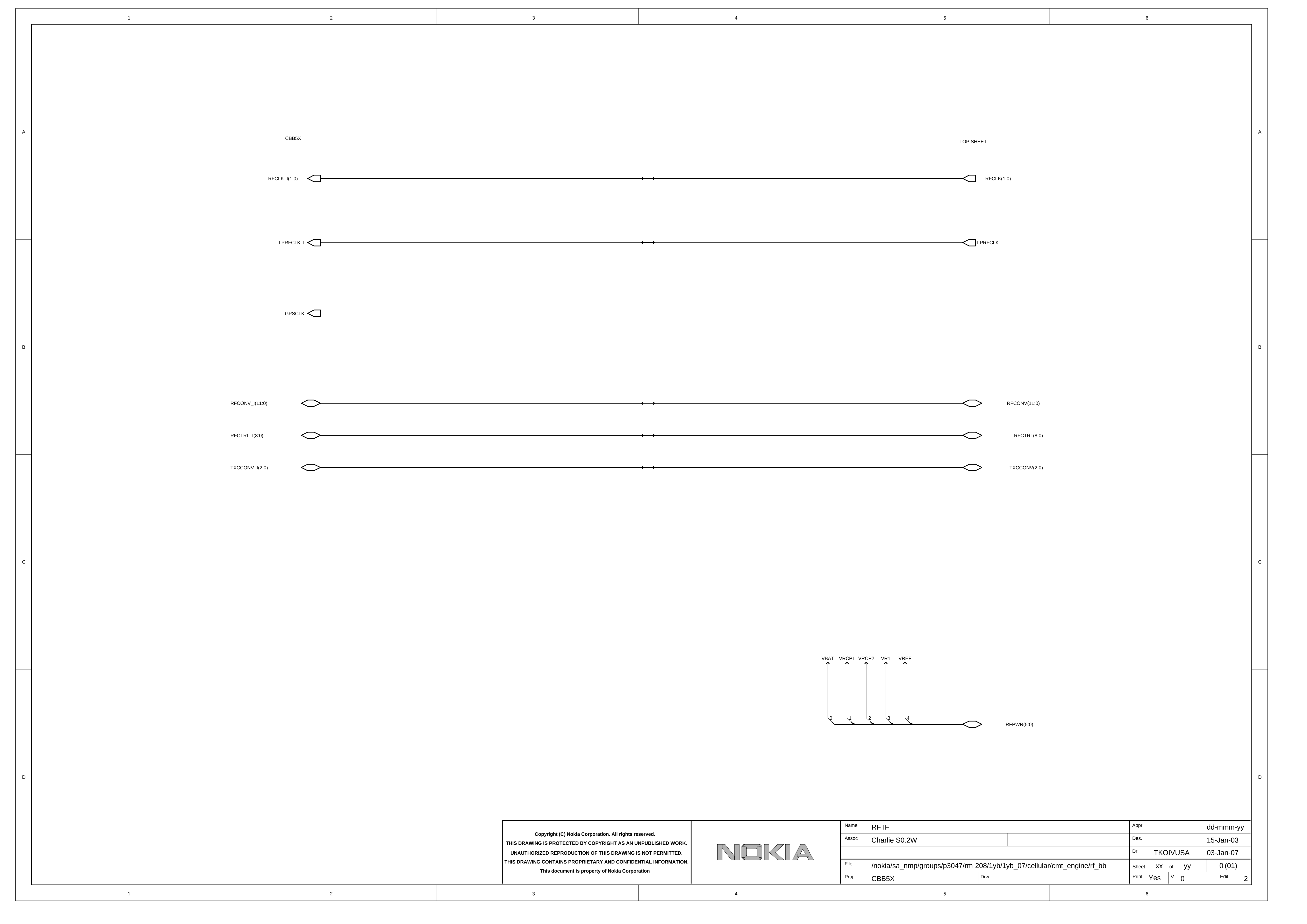


LPRFCLK_I
SLOWAD(6:0)
TXC_CONV_I(2:0)
POWER
basic
AUDIO(8:0)
H_BRIDGE(3:0)
FLEX_AUDIO(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
BETTY_CTRL_CMT(4:0)
SLOWAD(6:0)
TXC_CONV(2:0)
DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(5:0)
CBUS(3:0)
PUSL(7:0)
INTUSB(8:0)
PWRONX
RAP
rapstack
I2C(1:0)
PCM(3:0)
JTAG(6:0)
ETM(16:0)
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
LPRF_CMT(6:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
MMC_CMT(15:0)
MESSI_CMT(25:0)
KEYB_CMT(20:0)
SPI_CMT(3:0)
FCI_CMT(3:0)
GEN_CTRL_CMT(20:0)
USB_CMT(8:0)
NAND(15:0)
RF_BB
GPSCLK
LPRFCLK_I
TXCCONV_I(2:0)
LPRFCLK
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
USB_CONN
ape
INTUSB(8:0)
USB_CMT(8:0)
PWRONX
INTUSB(8:0)
PCM(3:0)
ETM(16:0)
JTAG(6:0)
PUSL(7:0)
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NOKIA
Name CMT_Engine Top level
Assoc Engine Release Database
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine
Proj Cement
Drw.
Appr dd-mmm-yy
Des. ArKa 27-May-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2


D2800 RAP3GS_V2.0E-PA
RFCLK_I(1:0)
PUSL(7:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
TXC(2:0)
CBUS(3:0)
ACI(1:0)
DIG_AUDIO(5:0)
PCM(3:0)
USB_CMT(8:0)
INT_SIM(5:0)
JTAG(6:0)
ETM(16:0)
EMINT(1:0)
NAND(15:0)
MESSI_CMT(25:0)
I2C(1:0)
KEYB_CMT(20:0)
FCI_CMT(3:0)
CAM_CTRL_CMT(4:0)
IRDA_CMT(2:0)
GEN_CTRL_CMT(20:0)
SPI_CMT(3:0)
CCP_CMT(3:0)
LPRF_CMT(6:0)
MMC_CMT(15:0)
GPS_CMT(2:0)
Note! This is for SW tracing purposes
Genio 72, internal or external boot
Test point for SPI CLK in EMU block
D2801 4347575|NONET
K5G2829ATC-DF75
COMBO 8Mx16 NOR
8Mx16 DDR DRAM
Bypass for memory
Bypass for CPU
VIO
VPP
VDRAM
VCORE
VRFC
GND
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NOKIA
Name RAPStack
Assoc CeBBo2
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/rap
Proj CeBBo2
Drw.
Appr dd-mmm-yy
Des. JARIM 06-May-04
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. Edit 2

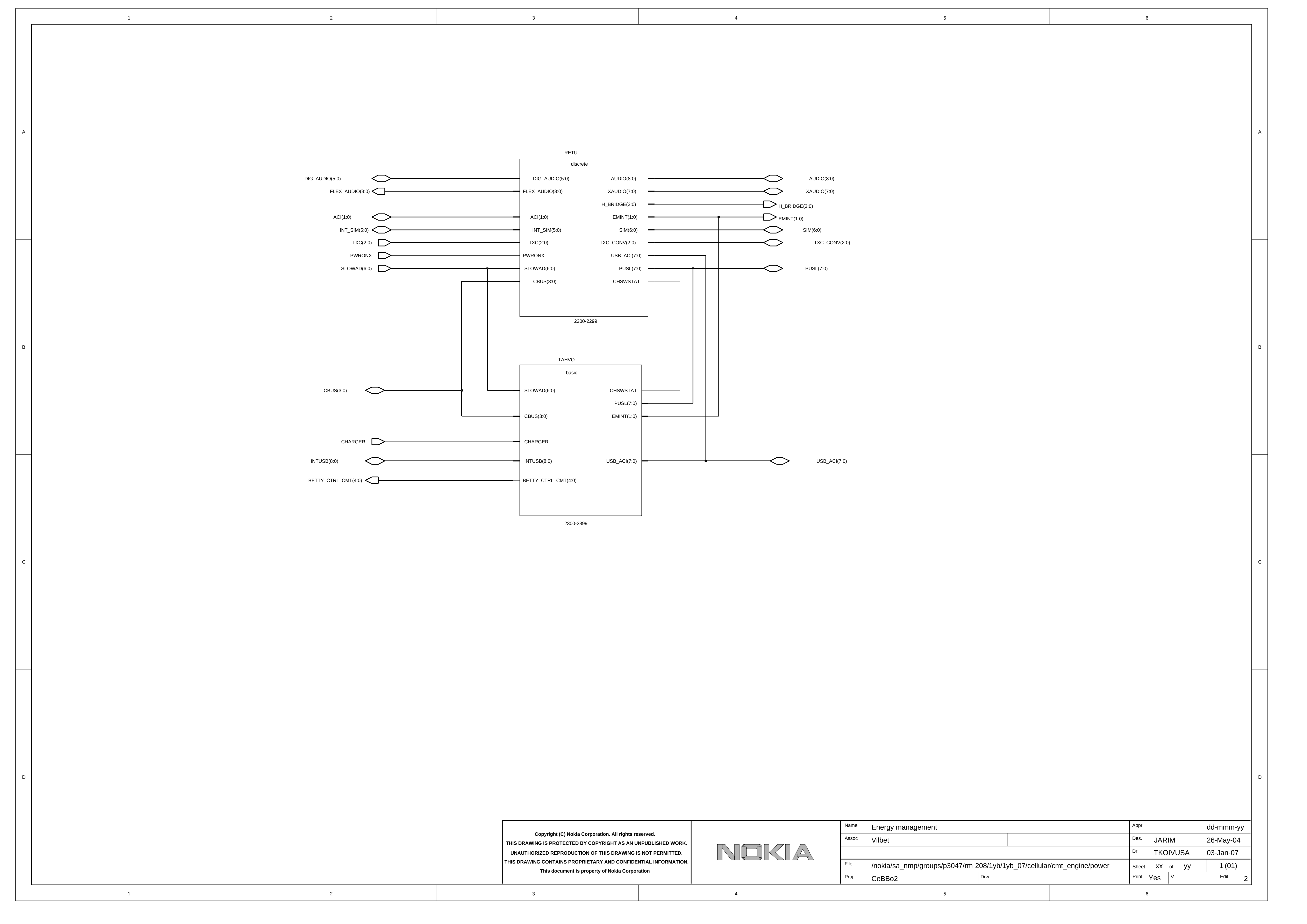


1
2
3
4
5
6
A
B
C
D
6
FTX
4
2
FRX2
2
1
FRX
1
0
CLK
0
INTUSB(8:0)
USB_CMT(8:0)
NOKIA
Name
USB Connections with APE
Assoc
Engine Release Database
File
/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/usb_conn
Proj
Cement
Drw.
Appr
dd-mmm-yy
Des.
KatjaKnu
04-Jun-03
Dr.
TKOIVUSA
03-Jan-07
Sheet
xx
of
yy
0 (01)
Print
Yes
V.
0.0
Edit
2



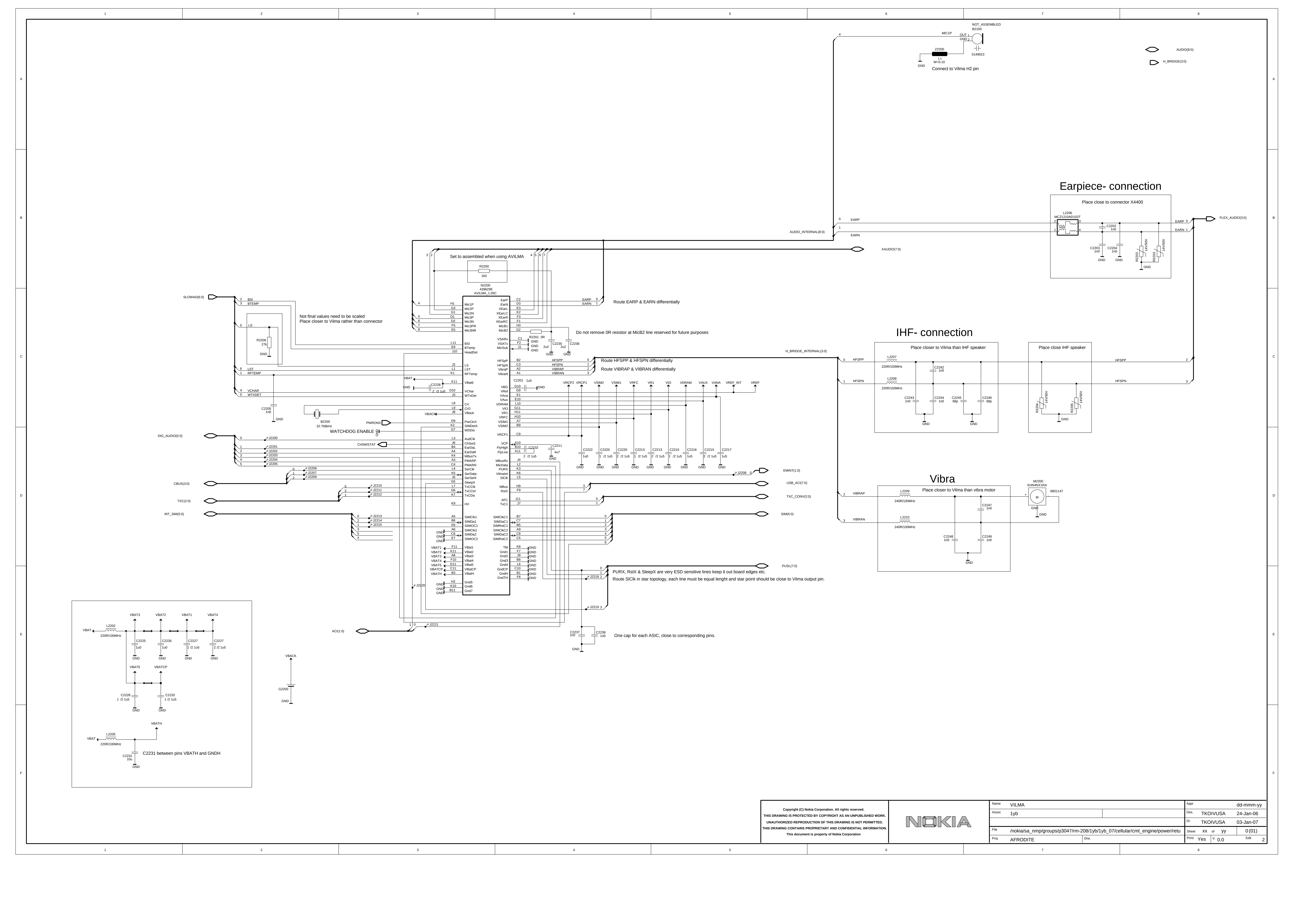
NOKIA

Name	RF IF	Appr	dd-mmm-yy
Assoc	Charlie S0.2W	Des.	15-Jan-03
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/rf_bb	Sheet xx of yy	0 (01)
Proj	CBB5X Drw.	Print Yes V. 0	Edit 2

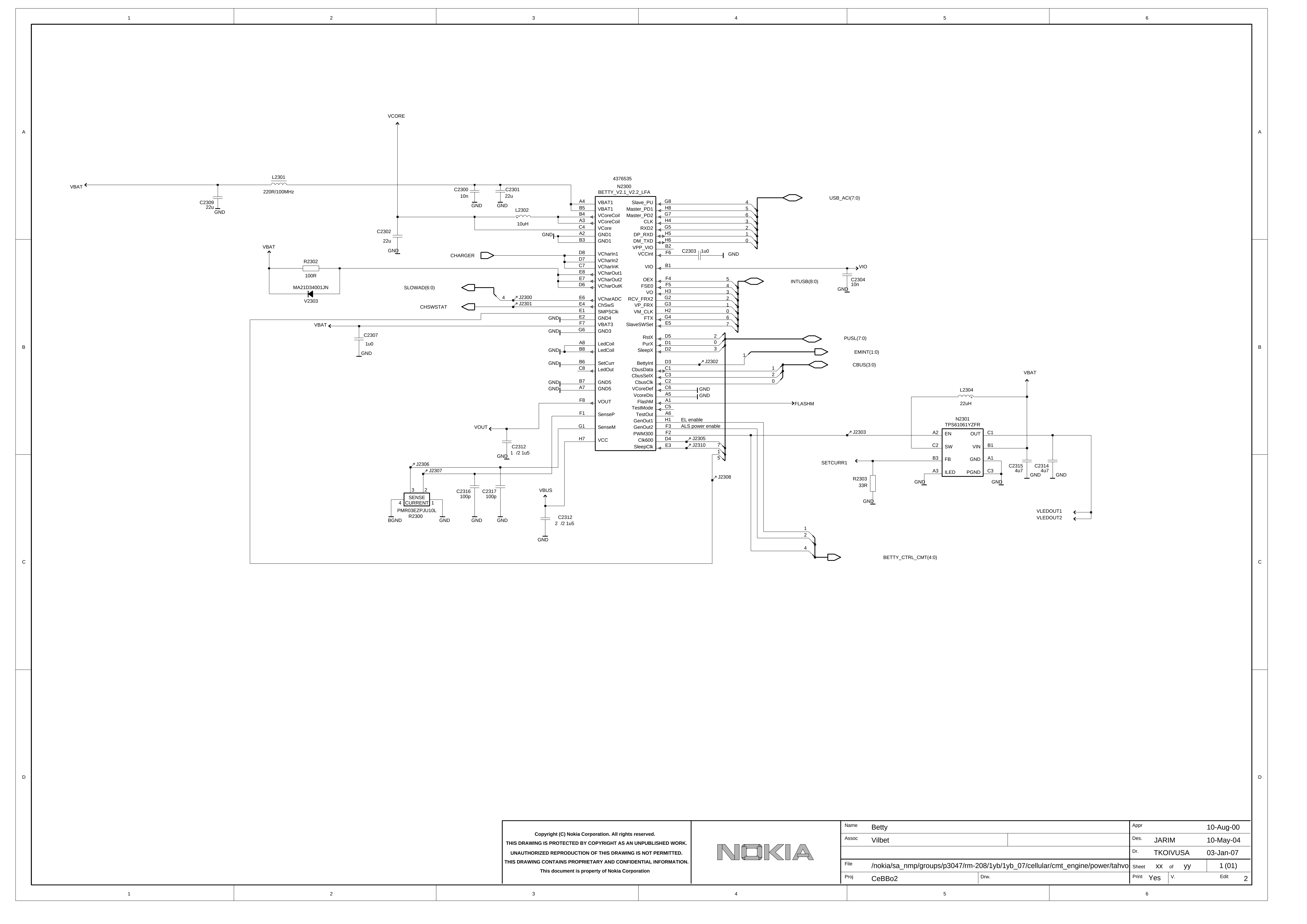


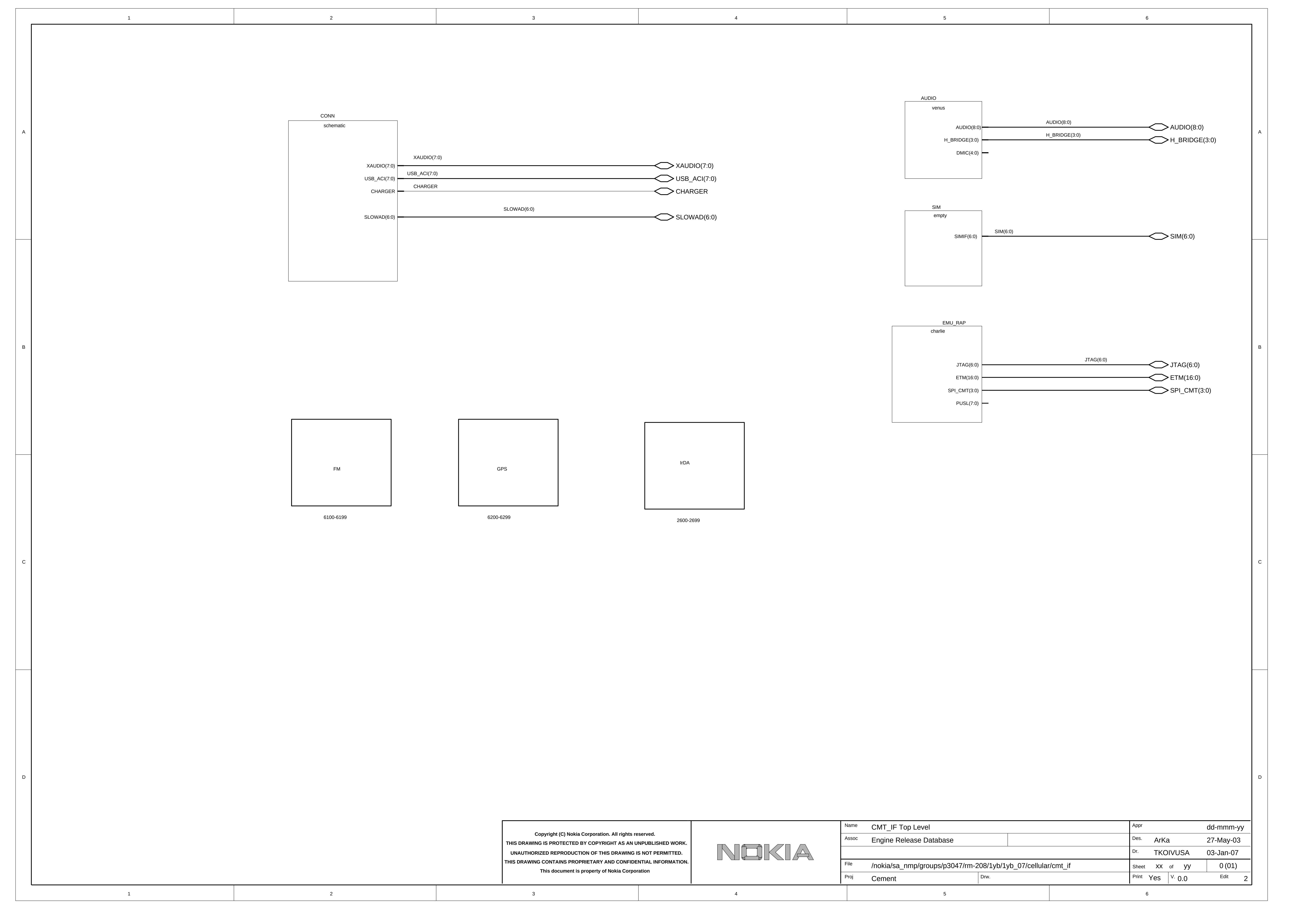
NOKIA

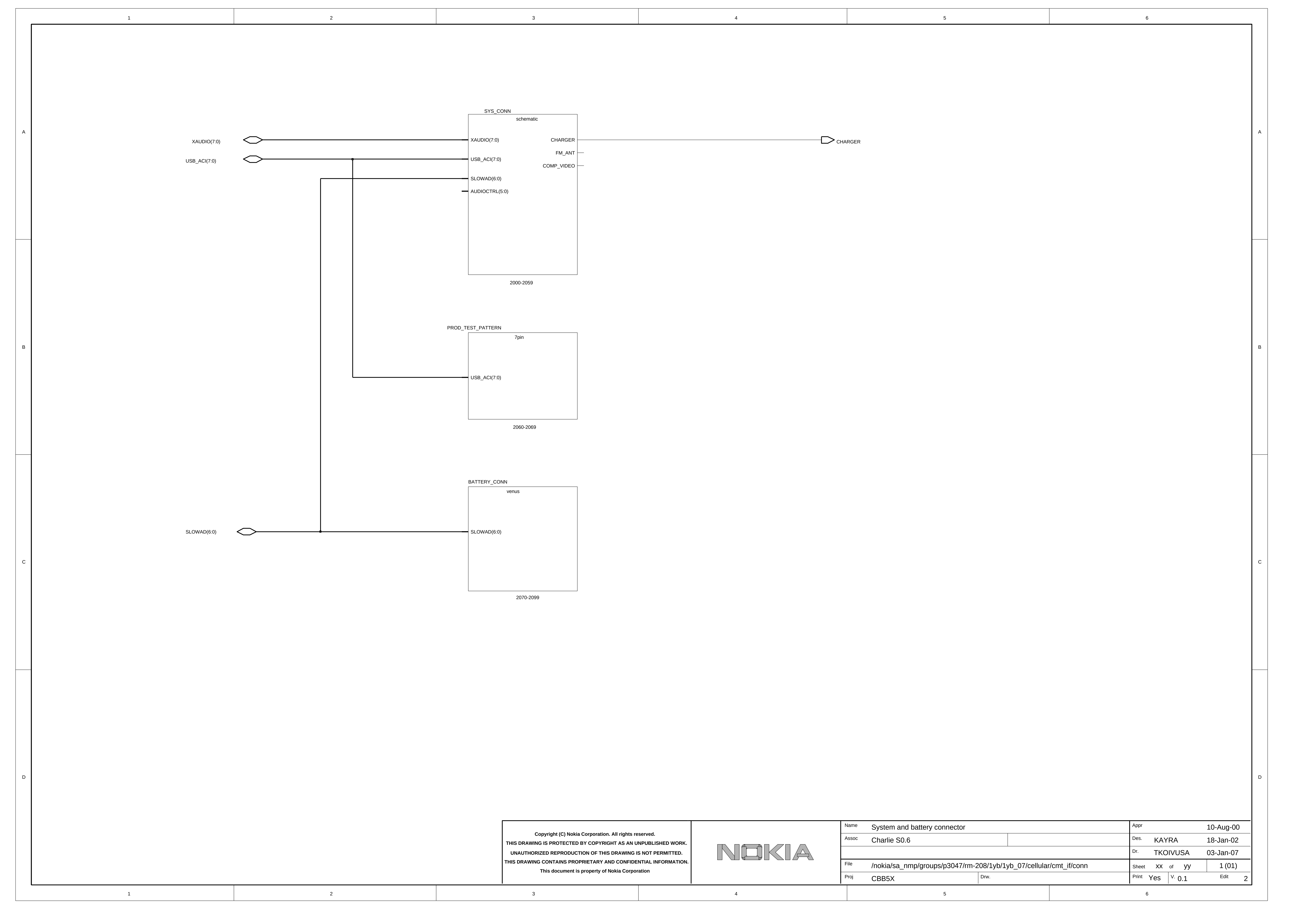
Name	Energy management	Appr	dd-mmm-yy
Assoc	Vilbet	Des. JARIM	26-May-04
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/power	Sheet xx of yy	1 (01)
Proj	CeBBo2 Drw.	Print Yes V.	Edit 2



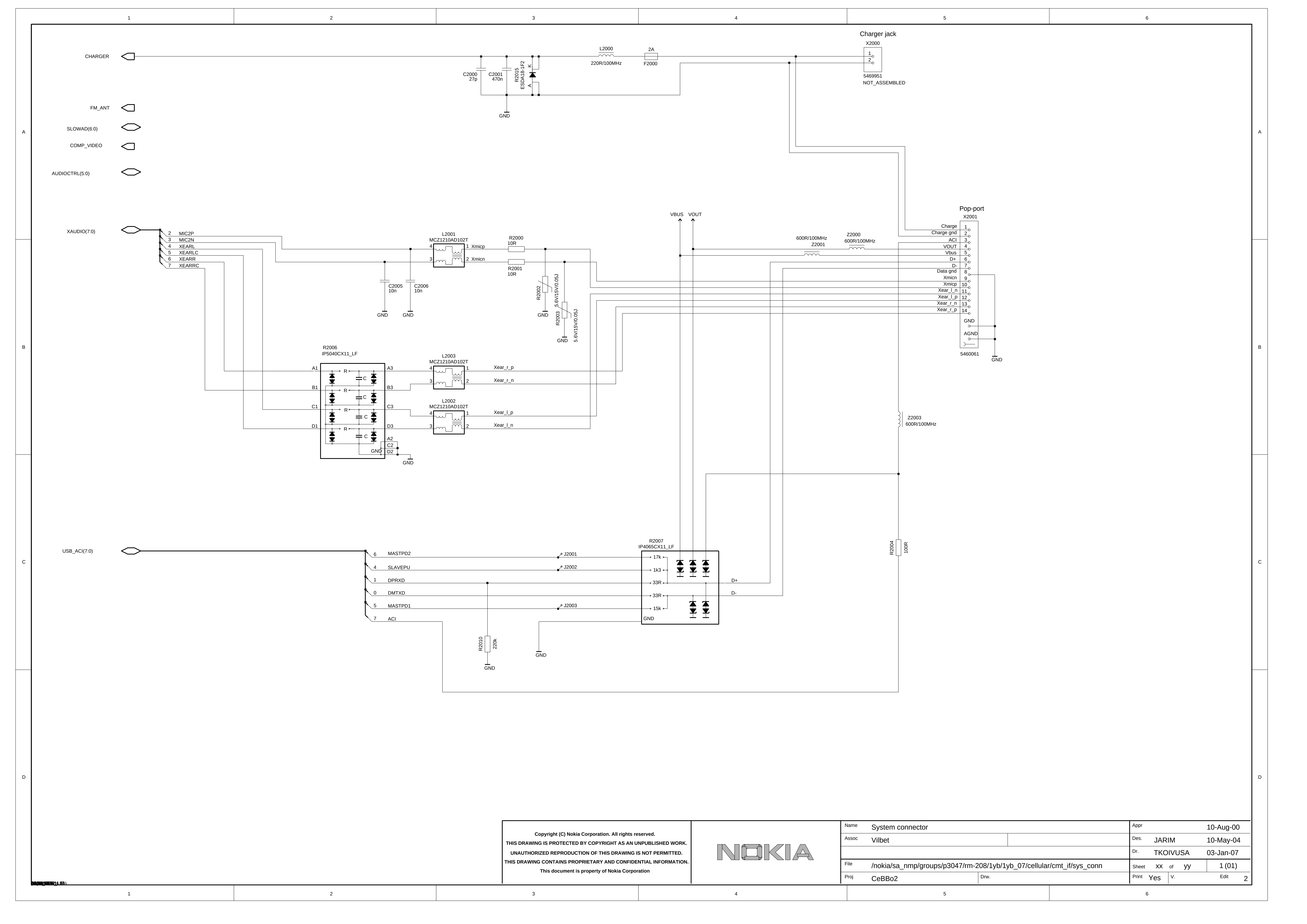
Earpiece- connection
Place close to connector X4400
IHF- connection
Place closer to Vilma than IHF speaker
Place close IHF speaker
Vibra
Place closer to Vilma than vibra motor
Connect to Vilma H2 pin
Set to assembled when using AVILMA
N2200
4396299
AVILMA_1.05C
Route EARP & EARN differentially
Not final values need to be scaled
Place closer to Vilma rather than connector
Do not remove 0R resistor at MicB2 line reserved for future purposes
Route HFSPP & HFSPN differentially
Route VIBRAP & VIBRAN differentially
WATCHDOG ENABLE
PURX, RstX & SleepX are very ESD sensitive lines keep it out board edges etc.
Route SIClk in star topology, each line must be equal lenght and star point should be close to Vilma output pin.
One cap for each ASIC, close to corresponding pins.
C2231 between pins VBATH and GNDH
SLOWAD(6:0)
DIG_AUDIO(5:0)
CBUS(3:0)
TXC(2:0)
INT_SIM(5:0)
ACI(1:0)
AUDIO_INTERNAL(8:0)
XAUDIO(7:0)
H_BRIDGE_INTERNAL(3:0)
FLEX_AUDIO(3:0)
AUDIO(8:0)
H_BRIDGE(3:0)
EMINT(1:0)
USB_ACI(7:0)
TXC_CONV(2:0)
SIM(6:0)
PUSL(7:0)
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NOKIA
Name VILMA
Assoc 1yb
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/power/retu
Proj AFRODITE
Appr dd-mmm-yy
Des. TKOIVUSA 24-Jan-06
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2


VCORE
VBAT
L2301
220R/100MHz
C2309
22u
GND
4376535
N2300
BETTY_V2.1_V2.2_LFA
C2300
10n
C2301
22u
L2302
10uH
C2302
22u
VBAT
R2302
100R
MA21D34001JN
V2303
CHARGER
SLOWAD(6:0)
J2300
J2301
CHSWSTAT
VBAT
C2307
1u0
VOUT
C2312
1 /2 1u5
J2306
J2307
SENSE
CURRENT
PMR03EZPJU10L
R2300
BGND
C2316
100p
C2317
100p
VBUS
C2312
2 /2 1u5
VBAT1
VBAT1
VCoreCoil
VCoreCoil
VCore
GND1
GND1
VCharIn1
VCharIn2
VCharInK
VCharOut1
VCharOut2
VCharOutK
VCharADC
ChSwS
SMPSClk
GND4
VBAT3
GND3
LedCoil
LedCoil
SetCurr
LedOut
GND5
GND5
VOUT
SenseP
SenseM
VCC
Slave_PU
Master_PD1
Master_PD2
CLK
RXD2
DP_RXD
DM_TXD
VPP_VIO
VCCint
VIO
OEX
FSE0
VO
RCV_FRX2
VP_FRX
VM_CLK
FTX
SlaveSWSet
RstX
PurX
SleepX
BettyInt
CbusData
CbusSelX
CbusClk
VCoreDef
VcoreDis
FlashM
TestMode
TestOut
GenOut1
GenOut2
PWM300
Clk600
SleepClk
C2303
1u0
EL enable
ALS power enable
J2302
J2303
J2305
J2310
J2308
USB_ACI(7:0)
VIO
C2304
10n
INTUSB(8:0)
PUSL(7:0)
EMINT(1:0)
CBUS(3:0)
FLASHM
BETTY_CTRL_CMT(4:0)
VBAT
L2304
22uH
N2301
TPS61061YZFR
EN
OUT
SW
VIN
FB
GND
ILED
PGND
SETCURR1
R2303
33R
C2315
4u7
C2314
4u7
VLEDOUT1
VLEDOUT2
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NOKIA
Name Betty
Assoc Vilbet
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_engine/power/tahvo
Proj CeBBo2
Drw.
Appr 10-Aug-00
Des. JARIM 10-May-04
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 1 (01)
Print Yes
V.
Edit 2


1
2
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4
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6
A
B
C
D
CONN
schematic
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
AUDIO
venus
AUDIO(8:0)
H_BRIDGE(3:0)
DMIC(4:0)
SIM
empty
SIMIF(6:0)
SIM(6:0)
EMU_RAP
charlie
JTAG(6:0)
ETM(16:0)
SPI_CMT(3:0)
PUSL(7:0)
FM
GPS
IrDA
6100-6199
6200-6299
2600-2699
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NOKIA
Name CMT_IF Top Level
Assoc Engine Release Database
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if
Proj Cement
Drw.
Appr dd-mmm-yy
Des. ArKa 27-May-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2

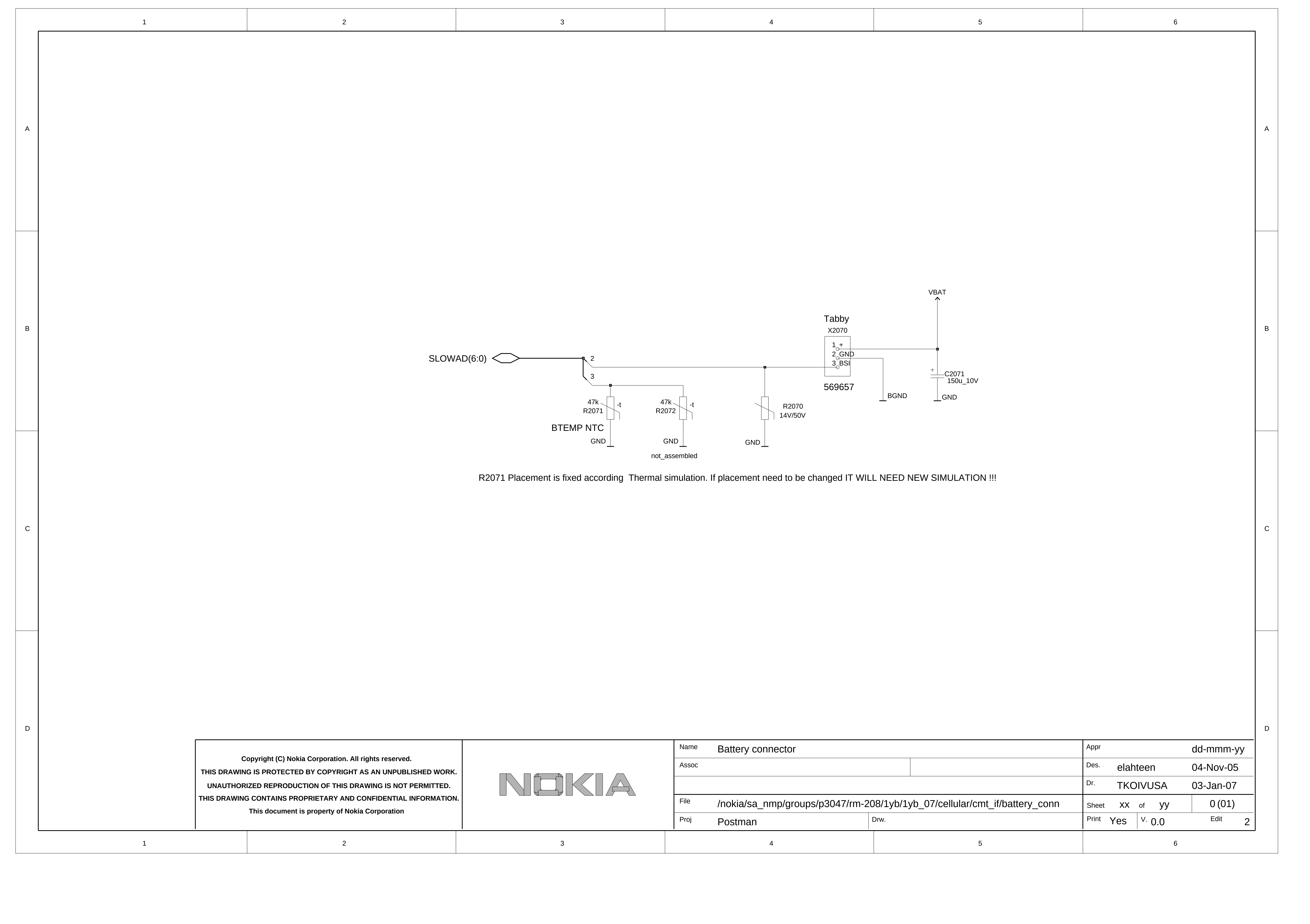


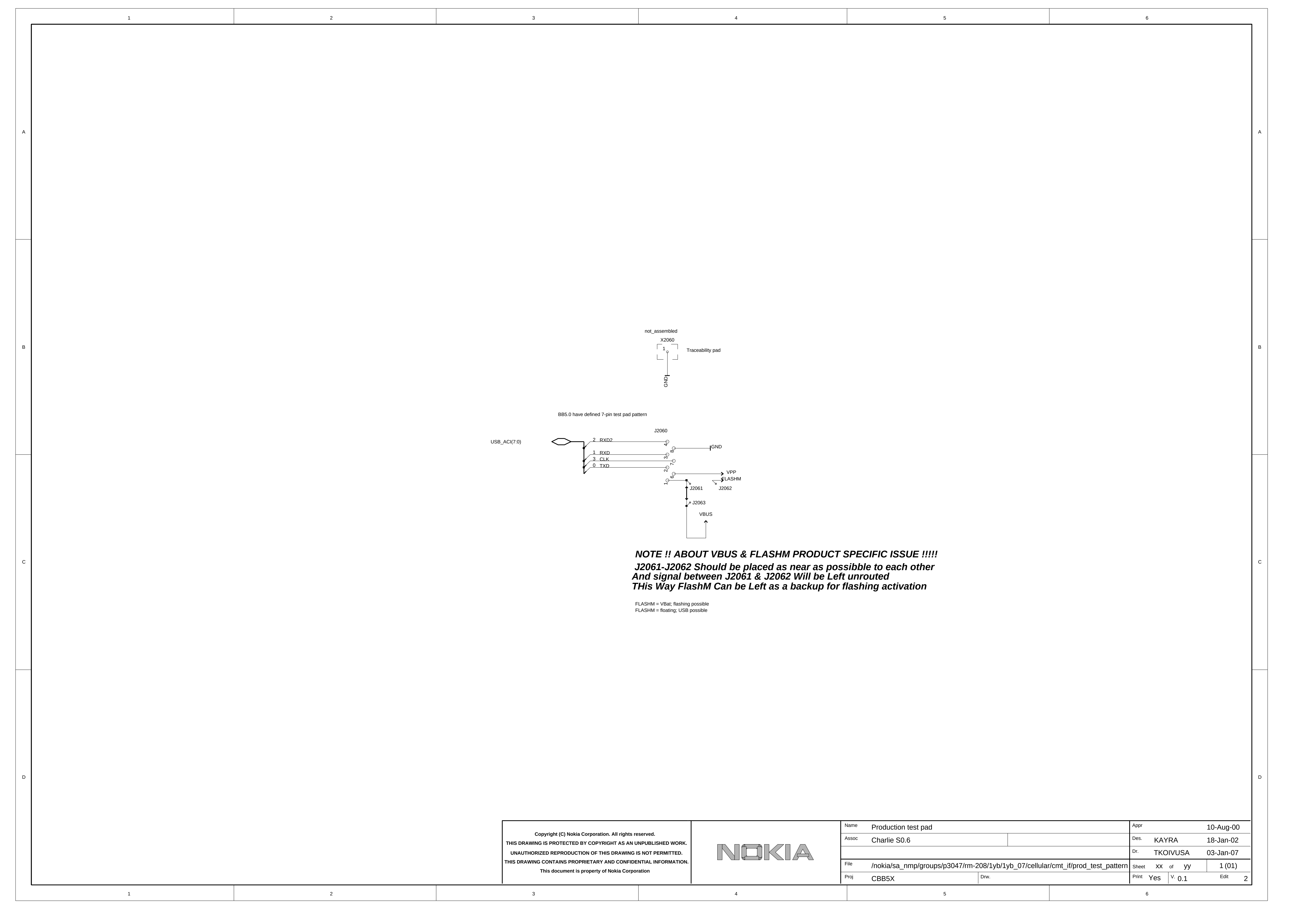
Name	System and battery connector	Appr	10-Aug-00
Assoc	Charlie S0.6	Des. KAYRA	18-Jan-02
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if/conn	Sheet xx of yy	1 (01)
Proj	CBB5X Drw.	Print Yes V. 0.1	Edit 2

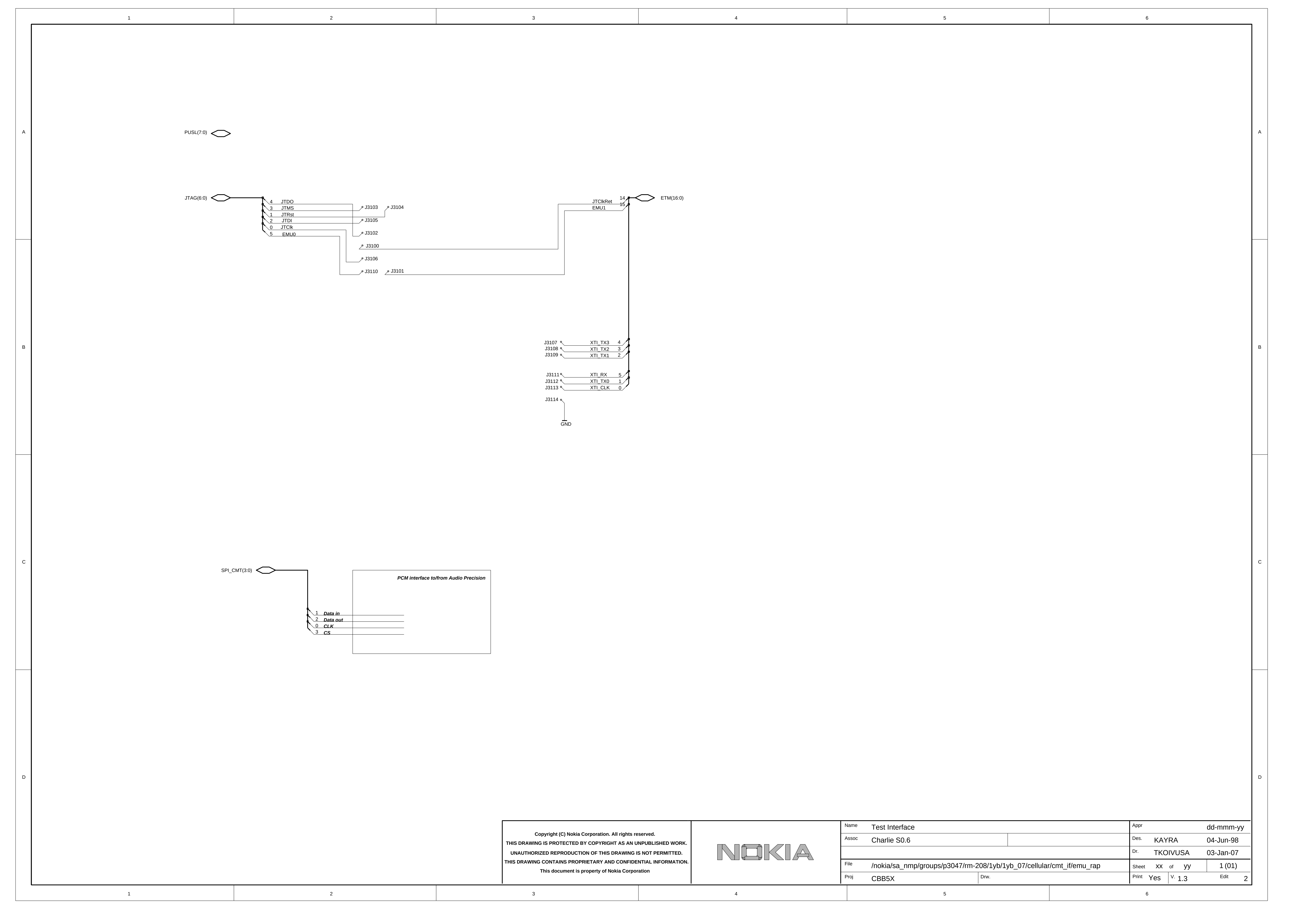


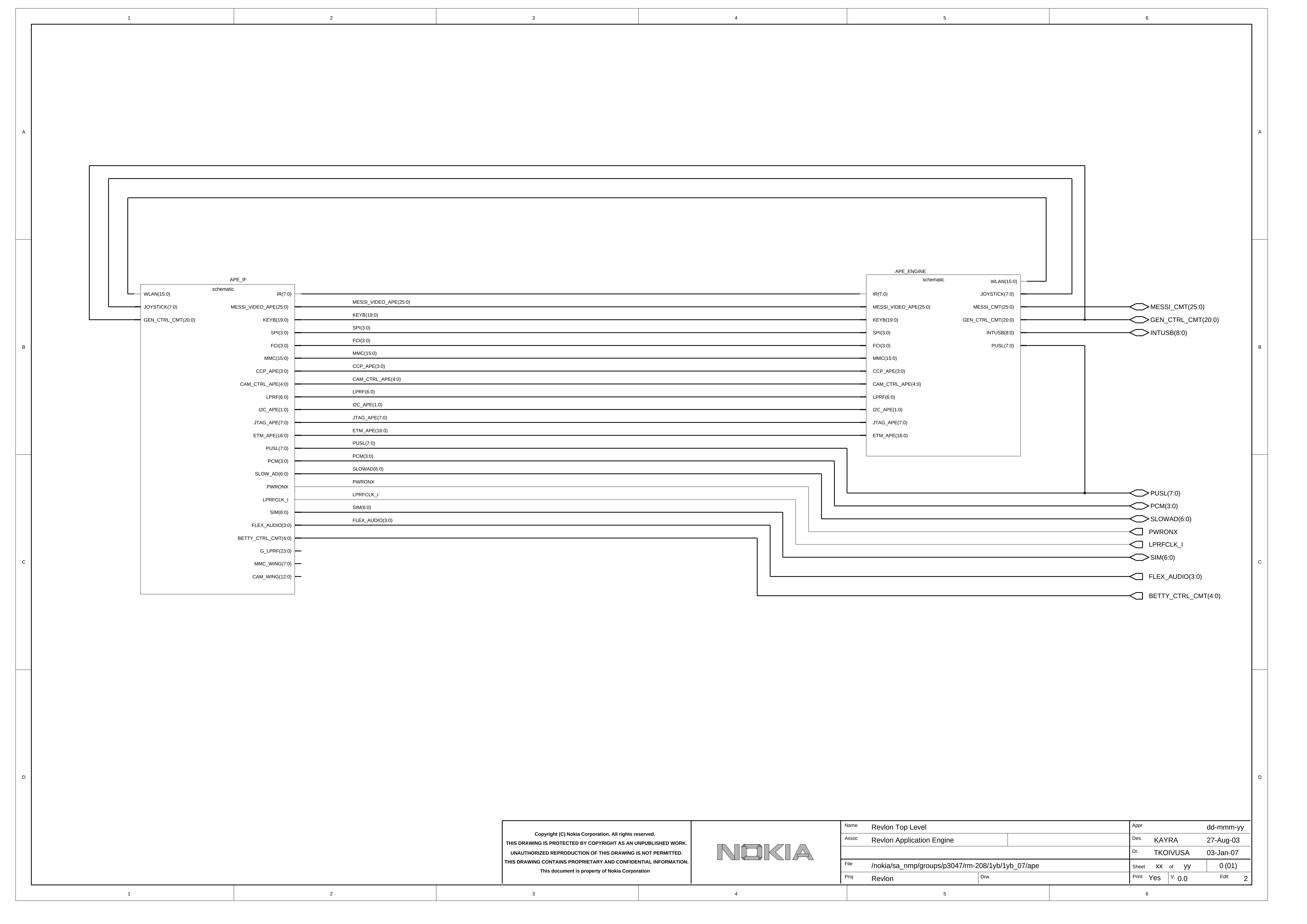
NOKIA

Name	System connector	Appr	10-Aug-00
Assoc	Vilbet	Des. JARIM	10-May-04
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if/sys_conn	Sheet xx of yy	1 (01)
Proj	CeBBo2 Drw.	Print Yes V.	Edit 2

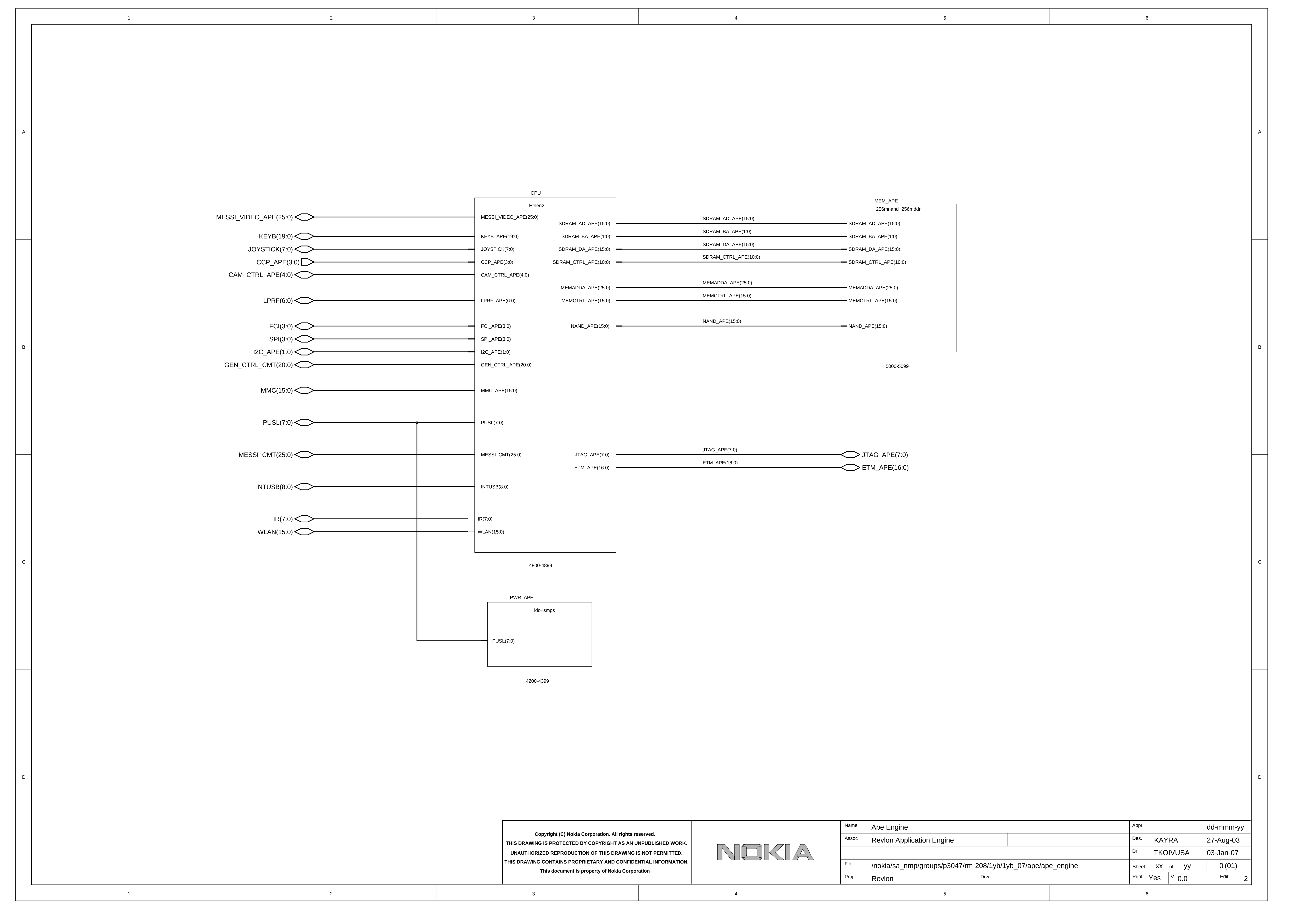

1
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3
4
5
6
A
B
C
D
VBAT
Tabby
X2070
1 +
2 GND
3 BSI
569657
SLOWAD(6:0)
2
3
BGND
C2071
150u_10V
GND
47k
R2071
-t
47k
R2072
-t
R2070
14V/50V
BTEMP NTC
GND
GND
GND
not_assembled
R2071 Placement is fixed according Thermal simulation. If placement need to be changed IT WILL NEED NEW SIMULATION !!!
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NOKIA
Name Battery connector
Assoc
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if/battery_conn
Proj Postman
Drw.
Appr dd-mmm-yy
Des. elahteen 04-Nov-05
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2


not_assembled
X2060
1
Traceability pad
GND
BB5.0 have defined 7-pin test pad pattern
J2060
USB_ACI(7:0)
2 RXD2
1 RXD
3 CLK
0 TXD
GND
VPP
FLASHM
J2061
J2062
J2063
VBUS
NOTE !! ABOUT VBUS & FLASHM PRODUCT SPECIFIC ISSUE !!!!!
J2061-J2062 Should be placed as near as possibble to each other
And signal between J2061 & J2062 Will be Left unrouted
THis Way FlashM Can be Left as a backup for flashing activation
FLASHM = VBat; flashing possible
FLASHM = floating; USB possible
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NOKIA
Name Production test pad
Assoc Charlie S0.6
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if/prod_test_pattern
Proj CBB5X
Drw.
Appr 10-Aug-00
Des. KAYRA 18-Jan-02
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 1 (01)
Print Yes V. 0.1 Edit 2


PUSL(7:0)
JTAG(6:0)
4 JTDO
3 JTMS
1 JTRst
2 JTDI
0 JTClk
5 EMU0
J3103
J3104
J3105
J3102
J3100
J3106
J3110
J3101
JTClkRet 14
EMU1 15
ETM(16:0)
J3107 XTI_TX3 4
J3108 XTI_TX2 3
J3109 XTI_TX1 2
J3111 XTI_RX 5
J3112 XTI_TX0 1
J3113 XTI_CLK 0
J3114
GND
SPI_CMT(3:0)
PCM interface to/from Audio Precision
1 Data in
2 Data out
0 CLK
3 CS
Name Test Interface
Assoc Charlie S0.6
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/cellular/cmt_if/emu_rap
Proj CBB5X
Drw.
Appr dd-mmm-yy
Des. KAYRA 04-Jun-98
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 1 (01)
Print Yes V. 1.3 Edit 2
NOKIA

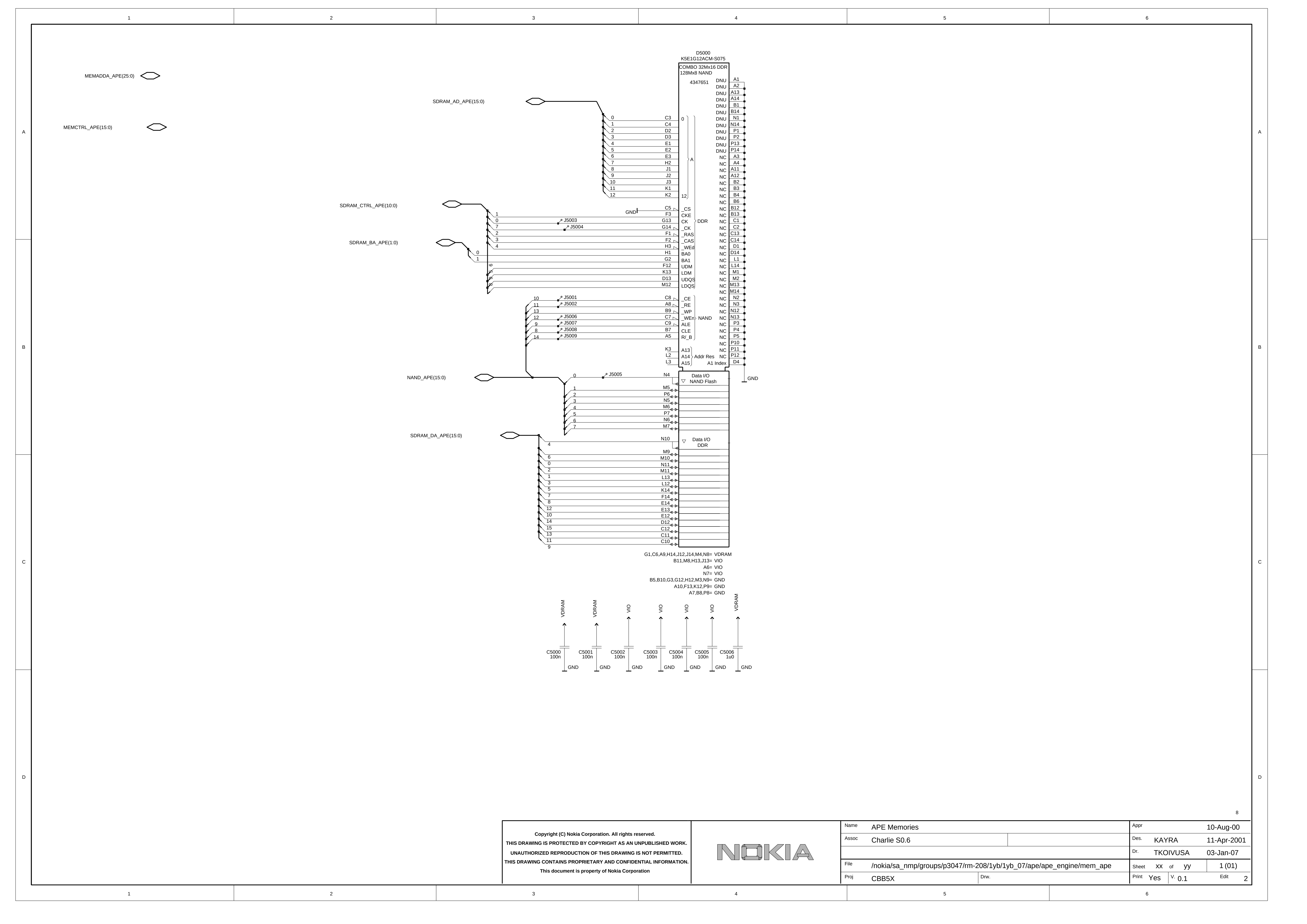


APE_IF
schematic
WLAN(15:0)
JOYSTICK(7:0)
GEN_CTRL_CMT(20:0)
IR(7:0)
MESSI_VIDEO_APE(25:0)
KEYB(19:0)
SPI(3:0)
FCI(3:0)
MMC(15:0)
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
LPRF(6:0)
I2C_APE(1:0)
JTAG_APE(7:0)
ETM_APE(16:0)
PUSL(7:0)
PCM(3:0)
SLOW_AD(6:0)
PWRONX
LPRFCLK_I
SIM(6:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
G_LPRF(23:0)
MMC_WING(7:0)
CAM_WING(12:0)
MESSI_VIDEO_APE(25:0)
KEYB(19:0)
SPI(3:0)
FCI(3:0)
MMC(15:0)
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
LPRF(6:0)
I2C_APE(1:0)
JTAG_APE(7:0)
ETM_APE(16:0)
PUSL(7:0)
PCM(3:0)
SLOWAD(6:0)
PWRONX
LPRFCLK_I
SIM(6:0)
FLEX_AUDIO(3:0)
APE_ENGINE
schematic
WLAN(15:0)
IR(7:0)
JOYSTICK(7:0)
MESSI_VIDEO_APE(25:0)
MESSI_CMT(25:0)
KEYB(19:0)
GEN_CTRL_CMT(20:0)
SPI(3:0)
INTUSB(8:0)
FCI(3:0)
PUSL(7:0)
MMC(15:0)
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
LPRF(6:0)
I2C_APE(1:0)
JTAG_APE(7:0)
ETM_APE(16:0)
MESSI_CMT(25:0)
GEN_CTRL_CMT(20:0)
INTUSB(8:0)
PUSL(7:0)
PCM(3:0)
SLOWAD(6:0)
PWRONX
LPRFCLK_I
SIM(6:0)
FLEX_AUDIO(3:0)
BETTY_CTRL_CMT(4:0)
NOKIA
Name Revlon Top Level
Assoc Revlon Application Engine
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape
Proj Revlon
Drw.
Appr dd-mmm-yy
Des. KAYRA 27-Aug-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2



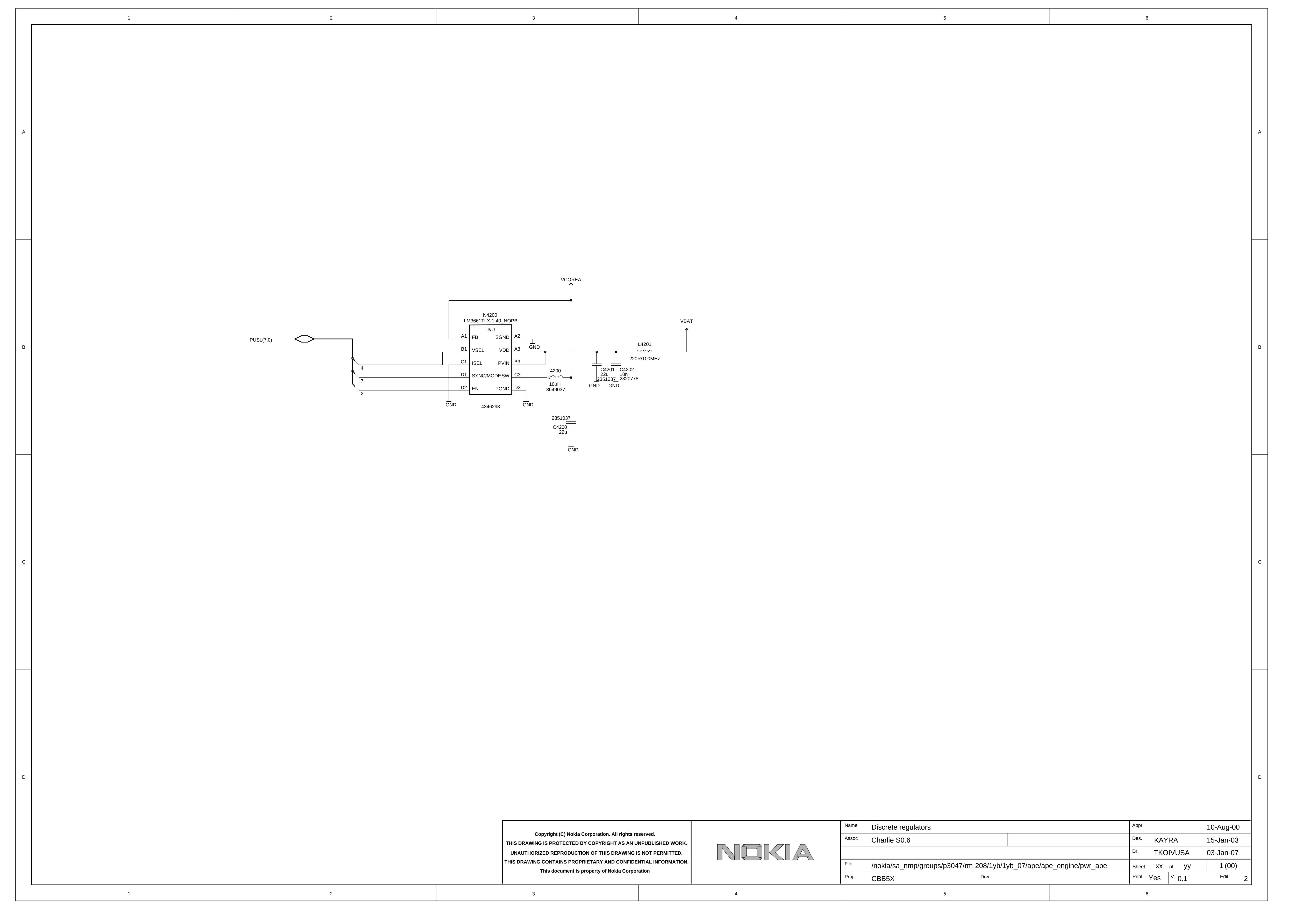
NOKIA

Name	Ape Engine	Appr	dd-mmm-yy
Assoc	Revlon Application Engine	Des. KAYRA	27-Aug-03
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_engine	Sheet xx of yy	0 (01)
Proj	Revlon Drw.	Print Yes V. 0.0	Edit 2



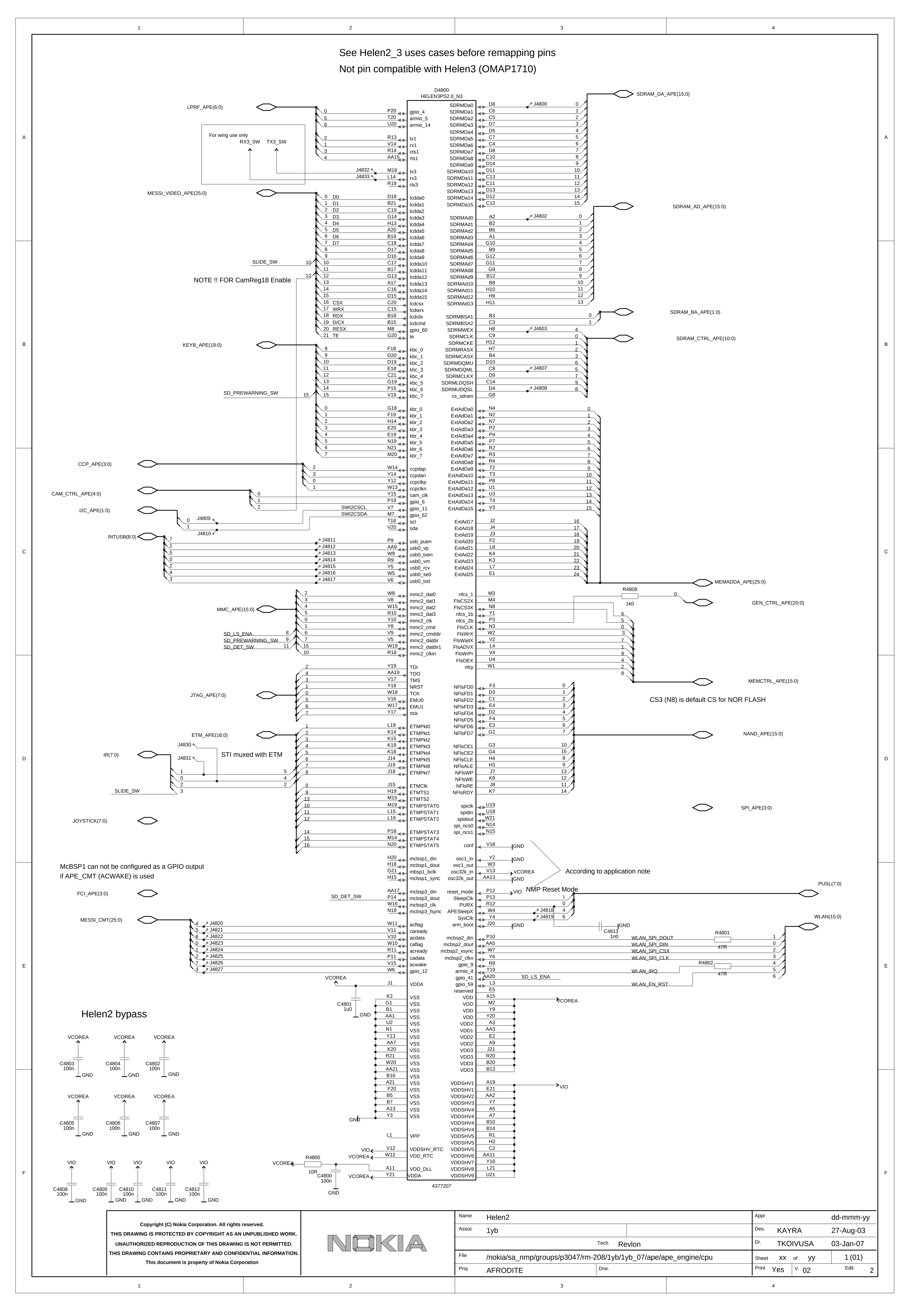
NOKIA

Name	APE Memories	Appr	10-Aug-00
Assoc	Charlie S0.6	Des. KAYRA	11-Apr-2001
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_engine/mem_ape	Sheet xx of yy	1 (01)
Proj	CBB5X	Drw.	Print Yes V. 0.1 Edit 2

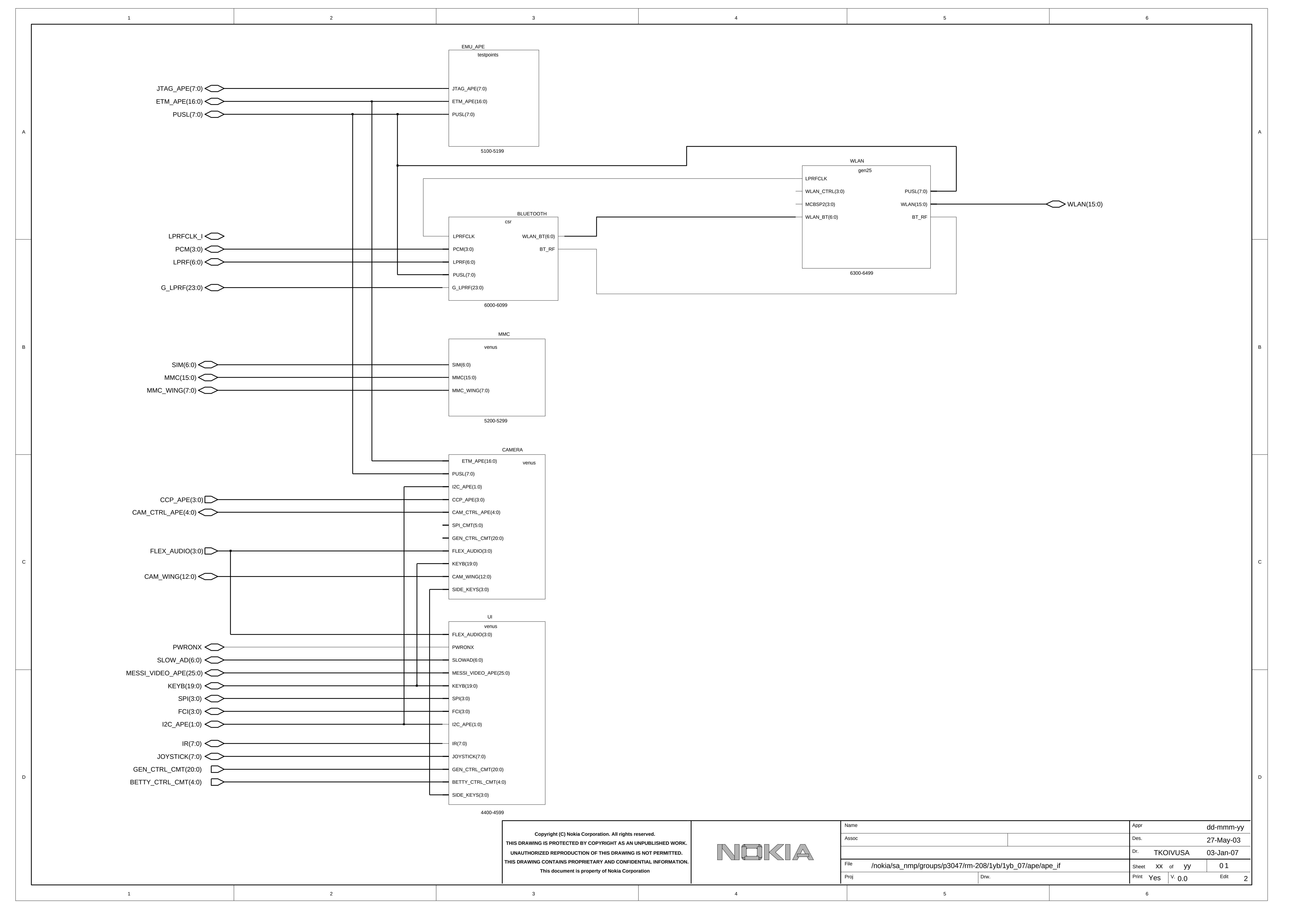


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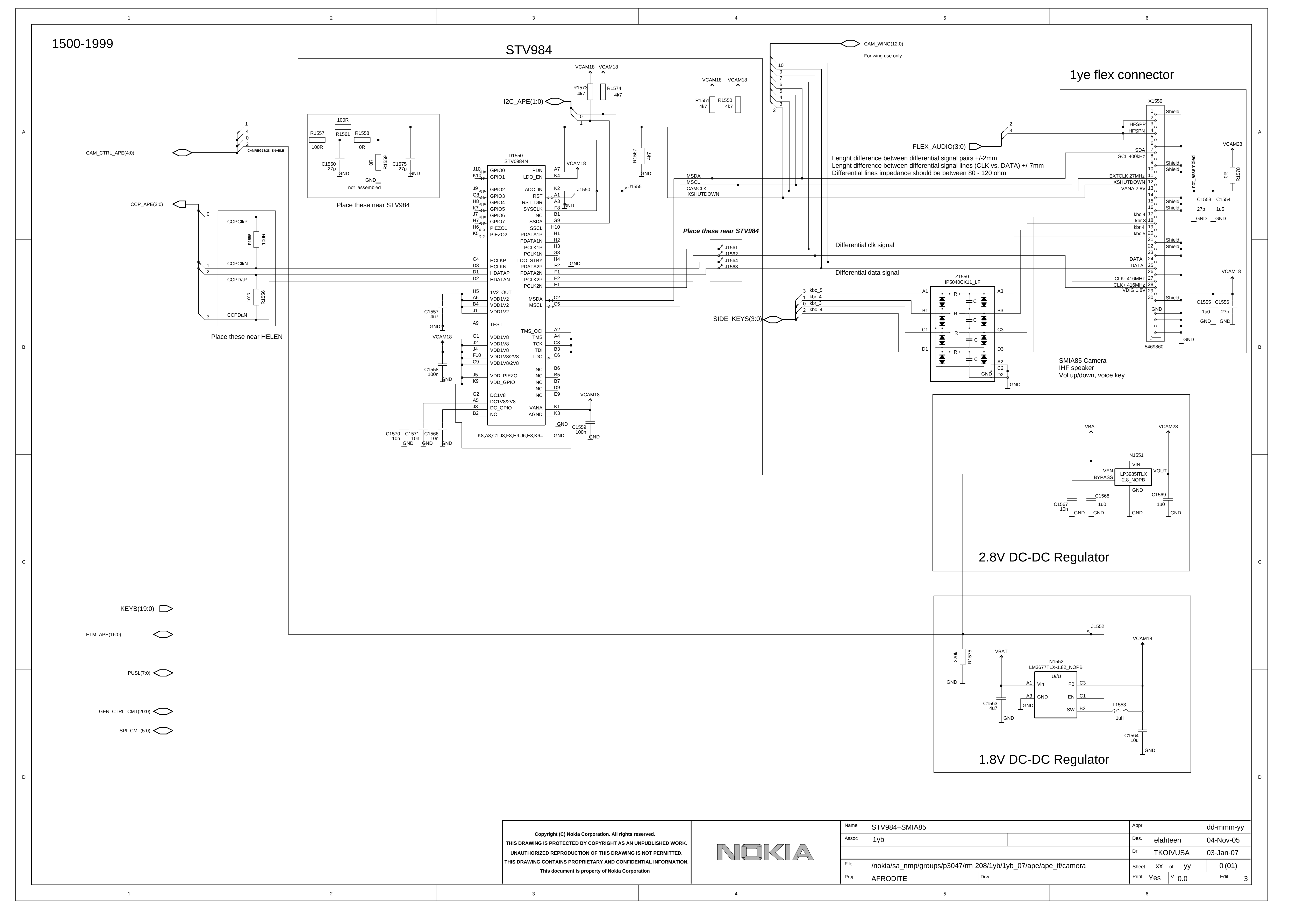
Name	Discrete regulators	Appr	10-Aug-00
Assoc	Charlie S0.6	Des. KAYRA	15-Jan-03
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_engine/pwr_ape	Sheet xx of yy	1 (00)
Proj	CBB5X Drw.	Print Yes V. 0.1	Edit 2



See Helen2_3 uses cases before remapping pins
Not pin compatible with Helen3 (OMAP1710)
D4800
HELEN3PS2.0_N3
LPRF_APE(6:0)
For wing use only
RX3_SW TX3_SW
MESSI_VIDEO_APE(25:0)
SLIDE_SW
NOTE !! FOR CamReg18 Enable
KEYB_APE(19:0)
SD_PREWARNING_SW
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
I2C_APE(1:0)
SWI2CSCL
SWI2CSDA
INTUSB(8:0)
MMC_APE(15:0)
SD_LS_ENA
SD_PREWARNING_SW
SD_DET_SW
JTAG_APE(7:0)
ETM_APE(16:0)
STI muxed with ETM
IR(7:0)
JOYSTICK(7:0)
McBSP1 can not be configured as a GPIO output
if APE_CMT (ACWAKE) is used
FCI_APE(3:0)
MESSI_CMT(25:0)
SDRAM_DA_APE(15:0)
SDRAM_AD_APE(15:0)
SDRAM_BA_APE(1:0)
SDRAM_CTRL_APE(10:0)
MEMADDA_APE(25:0)
R4809
1k0
GEN_CTRL_APE(20:0)
MEMCTRL_APE(15:0)
CS3 (N8) is default CS for NOR FLASH
NAND_APE(15:0)
SPI_APE(3:0)
According to application note
NMP Reset Mode
PUSL(7:0)
WLAN(15:0)
WLAN_SPI_DOUT
WLAN_SPI_DIN
WLAN_SPI_CSX
WLAN_SPI_CLK
WLAN_IRQ
WLAN_EN_RST
R4801 47R
R4802 47R
SD_LS_ENA
VCOREA
VIO
GND
Helen2 bypass
4377207
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NOKIA
Name Helen2
Assoc 1yb
Tech Revlon
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_engine/cpu
Proj AFRODITE
Drw.
Appr dd-mmm-yy
Des. KAYRA 27-Aug-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 1 (01)
Print Yes V. 02 Edit 2

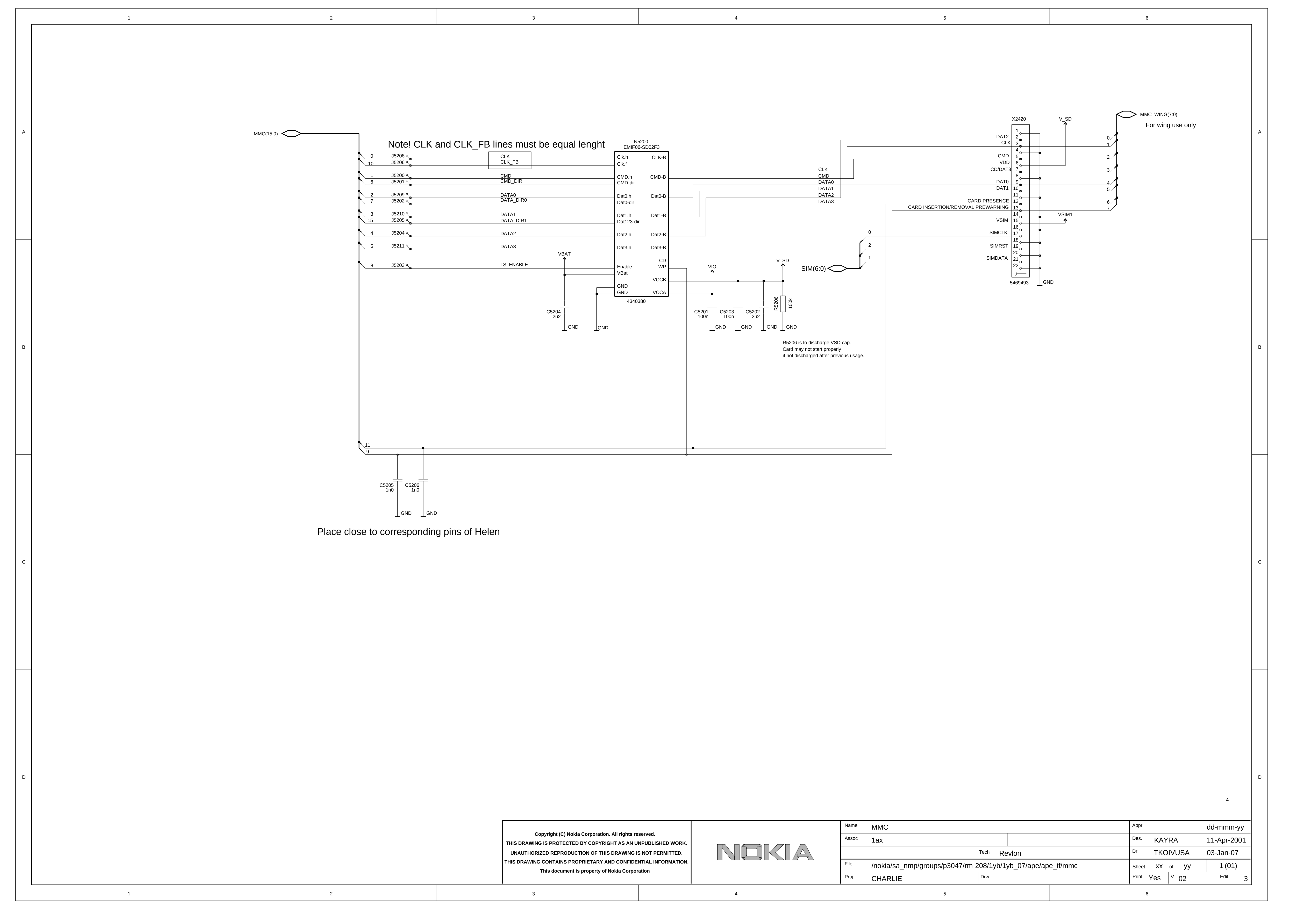


EMU_APE
testpoints
JTAG_APE(7:0)
ETM_APE(16:0)
PUSL(7:0)
5100-5199
WLAN
gen25
LPRFCLK
WLAN_CTRL(3:0)
MCBSP2(3:0)
WLAN_BT(6:0)
PUSL(7:0)
WLAN(15:0)
BT_RF
6300-6499
WLAN(15:0)
BLUETOOTH
csr
LPRFCLK
PCM(3:0)
LPRF(6:0)
PUSL(7:0)
G_LPRF(23:0)
WLAN_BT(6:0)
BT_RF
6000-6099
LPRFCLK_I
PCM(3:0)
LPRF(6:0)
G_LPRF(23:0)
MMC
venus
SIM(6:0)
MMC(15:0)
MMC_WING(7:0)
5200-5299
CAMERA
venus
ETM_APE(16:0)
PUSL(7:0)
I2C_APE(1:0)
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
SPI_CMT(5:0)
GEN_CTRL_CMT(20:0)
FLEX_AUDIO(3:0)
KEYB(19:0)
CAM_WING(12:0)
SIDE_KEYS(3:0)
UI
venus
FLEX_AUDIO(3:0)
PWRONX
SLOWAD(6:0)
MESSI_VIDEO_APE(25:0)
KEYB(19:0)
SPI(3:0)
FCI(3:0)
I2C_APE(1:0)
IR(7:0)
JOYSTICK(7:0)
GEN_CTRL_CMT(20:0)
BETTY_CTRL_CMT(4:0)
SIDE_KEYS(3:0)
4400-4599
PWRONX
SLOW_AD(6:0)
MESSI_VIDEO_APE(25:0)
KEYB(19:0)
SPI(3:0)
FCI(3:0)
I2C_APE(1:0)
IR(7:0)
JOYSTICK(7:0)
GEN_CTRL_CMT(20:0)
BETTY_CTRL_CMT(4:0)
CCP_APE(3:0)
CAM_CTRL_APE(4:0)
FLEX_AUDIO(3:0)
CAM_WING(12:0)
1 2 3 4 5 6
A B C D
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NOKIA
Name
Assoc
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if
Proj
Drw.
Appr dd-mmm-yy
Des. 27-May-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 1
Print Yes V. 0.0 Edit 2



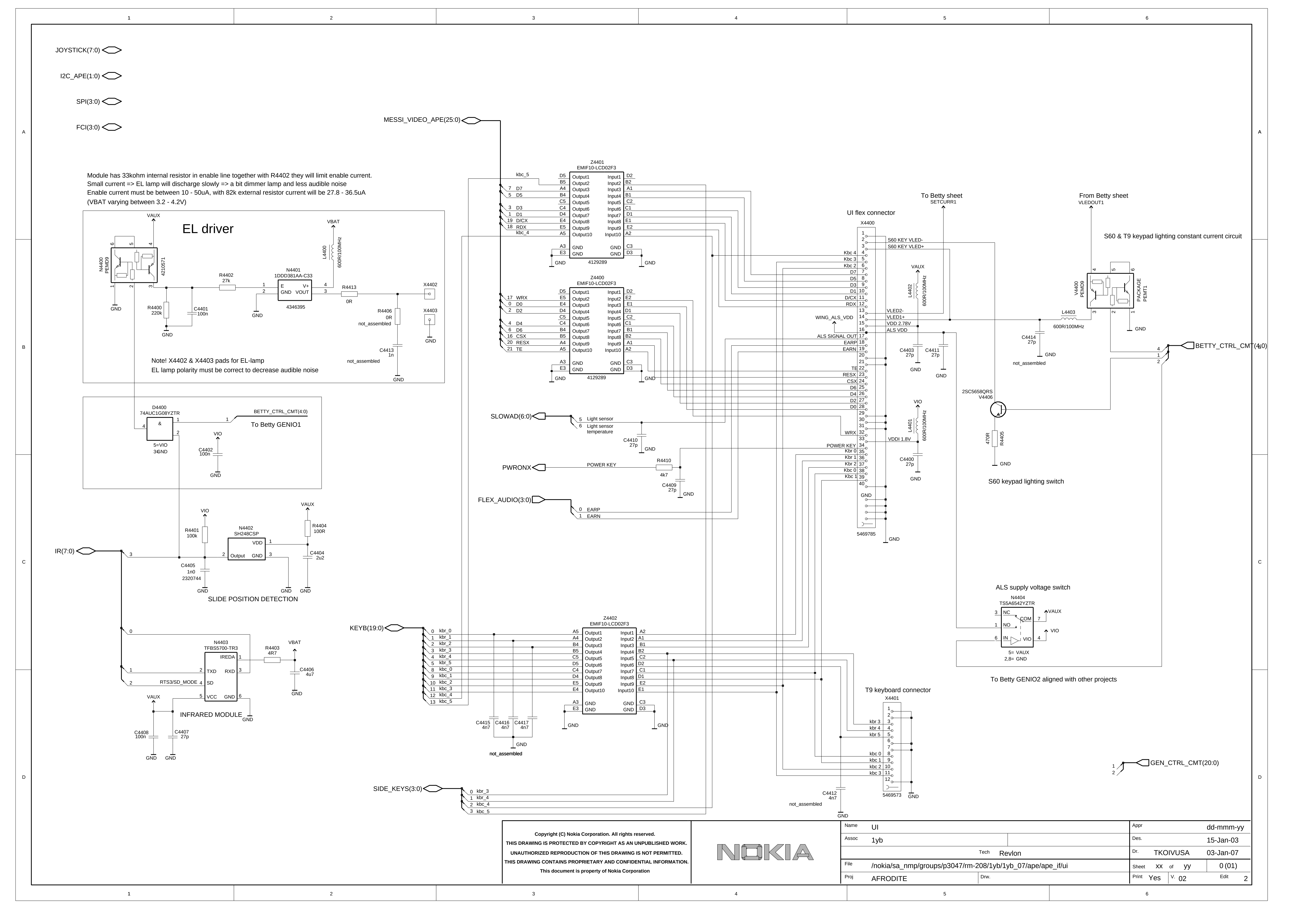
NOKIA

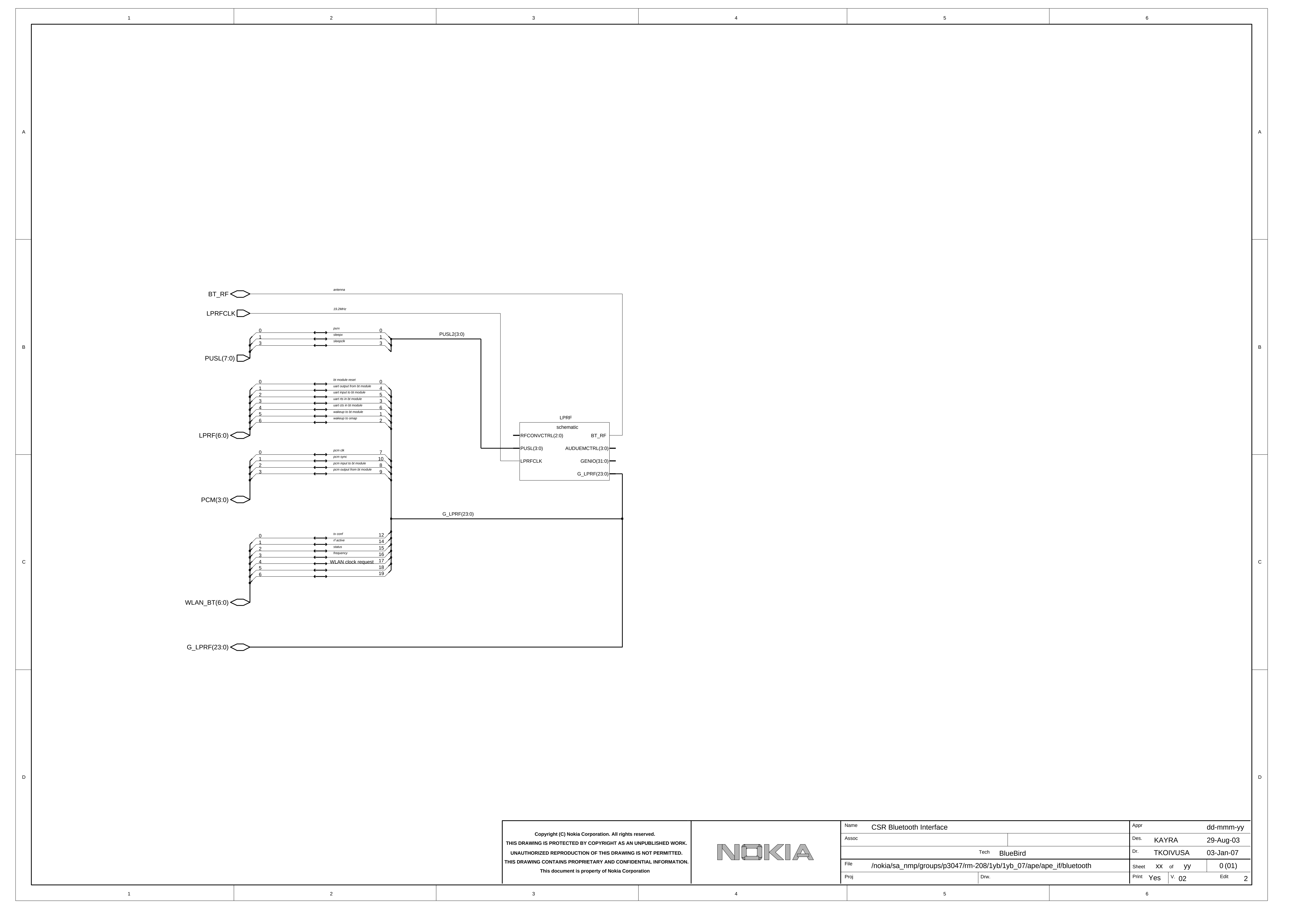
Name	STV984+SMIA85	Appr	dd-mmm-yy
Assoc	1yb	Des. elahteen	04-Nov-05
		Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if/camera	Sheet xx of yy	0 (01)
Proj	AFRODITE	Print Yes V. 0.0	Edit 3



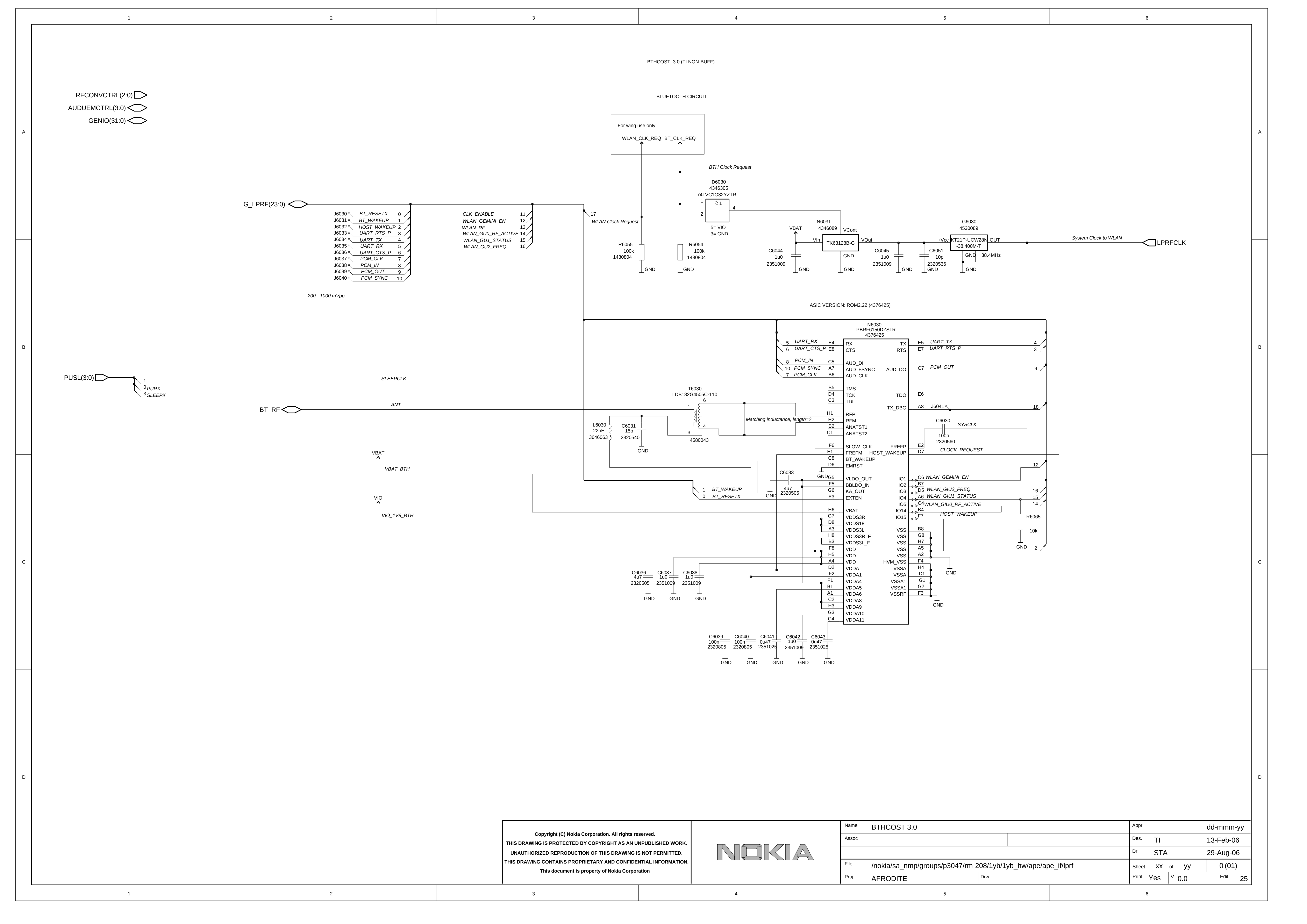
NOKIA

Name	MMC	Appr	dd-mmm-yy
Assoc	1ax	Des. KAYRA	11-Apr-2001
Tech	Revlon	Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if/mmc	Sheet xx of yy	1 (01)
Proj	CHARLIE	Print Yes V. 02	Edit 3


JOYSTICK(7:0)
I2C_APE(1:0)
SPI(3:0)
FCI(3:0)
MESSI_VIDEO_APE(25:0)
Module has 33kohm internal resistor in enable line together with R4402 they will limit enable current.
Small current => EL lamp will discharge slowly => a bit dimmer lamp and less audible noise
Enable current must be between 10 - 50uA, with 82k external resistor current will be 27.8 - 36.5uA
(VBAT varying between 3.2 - 4.2V)
EL driver
N4400 PEMD9
R4402 27k
N4401 1DDD381AA-C33
4346395
R4413 0R
R4400 220k
C4401 100n
R4406 0R not_assembled
C4413 1n not_assembled
L4400 600R/100MHz
X4402
X4403
Note! X4402 & X4403 pads for EL-lamp
EL lamp polarity must be correct to decrease audible noise
D4400 74AUC1G08YZTR
BETTY_CTRL_CMT(4:0)
To Betty GENIO1
C4402 100n
R4401 100k
N4402 SH248CSP
R4404 100R
C4404 2u2
C4405 1n0 2320744
SLIDE POSITION DETECTION
IR(7:0)
N4403 TFBS5700-TR3
R4403 4R7
C4406 4u7
RTS3/SD_MODE
C4408 100n
C4407 27p
INFRARED MODULE
Z4401 EMIF10-LCD02F3
4129289
Z4400 EMIF10-LCD02F3
4129289
SLOWAD(6:0)
Light sensor
Light sensor temperature
C4410 27p
PWRONX
POWER KEY
R4410 4k7
C4409 27p
FLEX_AUDIO(3:0)
EARP
EARN
KEYB(19:0)
Z4402 EMIF10-LCD02F3
C4415 4n7
C4416 4n7
C4417 4n7
not_assembled
SIDE_KEYS(3:0)
UI flex connector
X4400
5469785
To Betty sheet SETCURR1
From Betty sheet VLEDOUT1
S60 & T9 keypad lighting constant current circuit
S60 KEY VLED-
S60 KEY VLED+
WING_ALS_VDD
VLED2-
VLED1+
VDD 2.78V
ALS VDD
ALS SIGNAL OUT
VDDI 1.8V
L4402 600R/100MHz
L4401 600R/100MHz
L4403 600R/100MHz
C4403 27p
C4411 27p
C4414 27p not_assembled
C4400 27p
V4400 PEMD9 PACKAGE PEMT1
BETTY_CTRL_CMT(4:0)
2SC5658QRS V4406
R4405 470R
S60 keypad lighting switch
ALS supply voltage switch
N4404 TS5A6542YZTR
5= VAUX
2,8= GND
To Betty GENIO2 aligned with other projects
T9 keyboard connector
X4401
5469573
C4412 4n7 not_assembled
GEN_CTRL_CMT(20:0)
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NOKIA
Name UI
Assoc 1yb
Tech Revlon
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if/ui
Proj AFRODITE
Appr dd-mmm-yy
Des. 15-Jan-03
Dr. TKOIVUSA 03-Jan-07
Sheet xx of yy 0 (01)
Print Yes V. 02 Edit 2

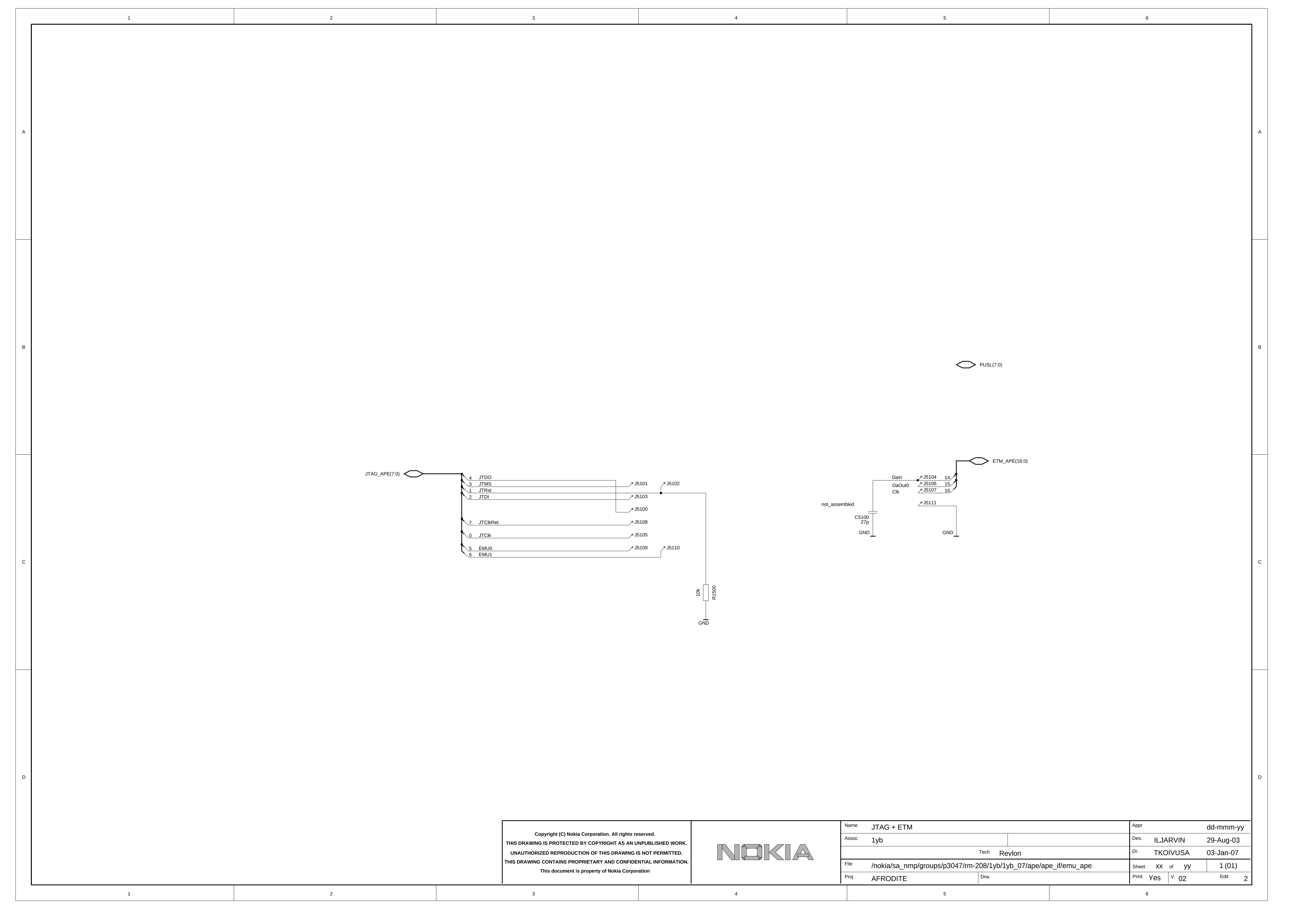


Name	CSR Bluetooth Interface	Appr	dd-mmm-yy
Assoc		Des.	KAYRA 29-Aug-03
Tech	BlueBird	Dr.	TKOIVUSA 03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if/bluetooth	Sheet	xx of yy 0 (01)
Proj	Drw.	Print	Yes V. 02 Edit 2



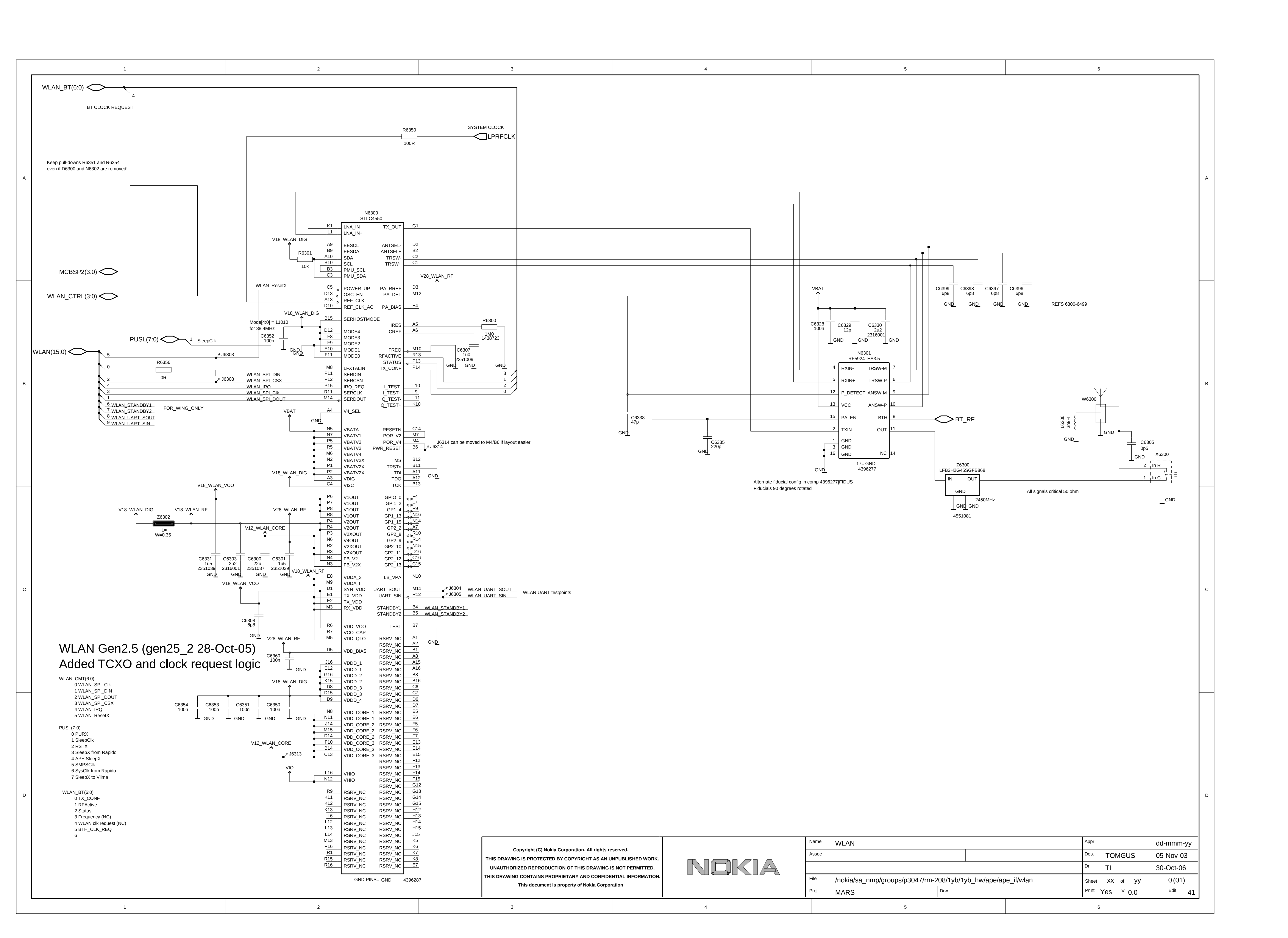
NOKIA

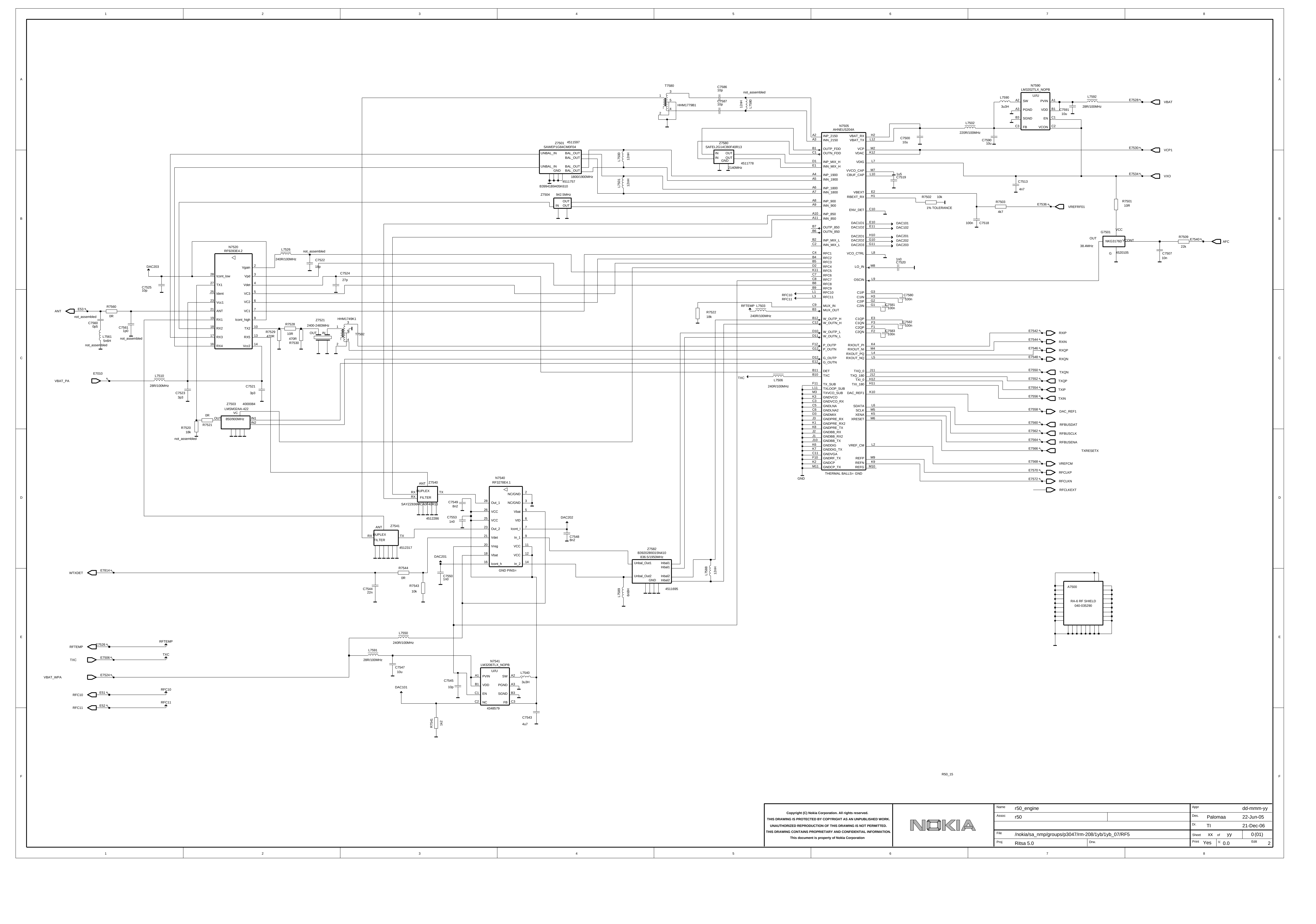
Name	BTHCOST 3.0	Appr	dd-mmm-yy
Assoc		Des. TI	13-Feb-06
		Dr. STA	29-Aug-06
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_hw/ape/ape_if/lprf	Sheet xx of yy	0 (01)
Proj	AFRODITE	Print Yes V. 0.0	Edit 25



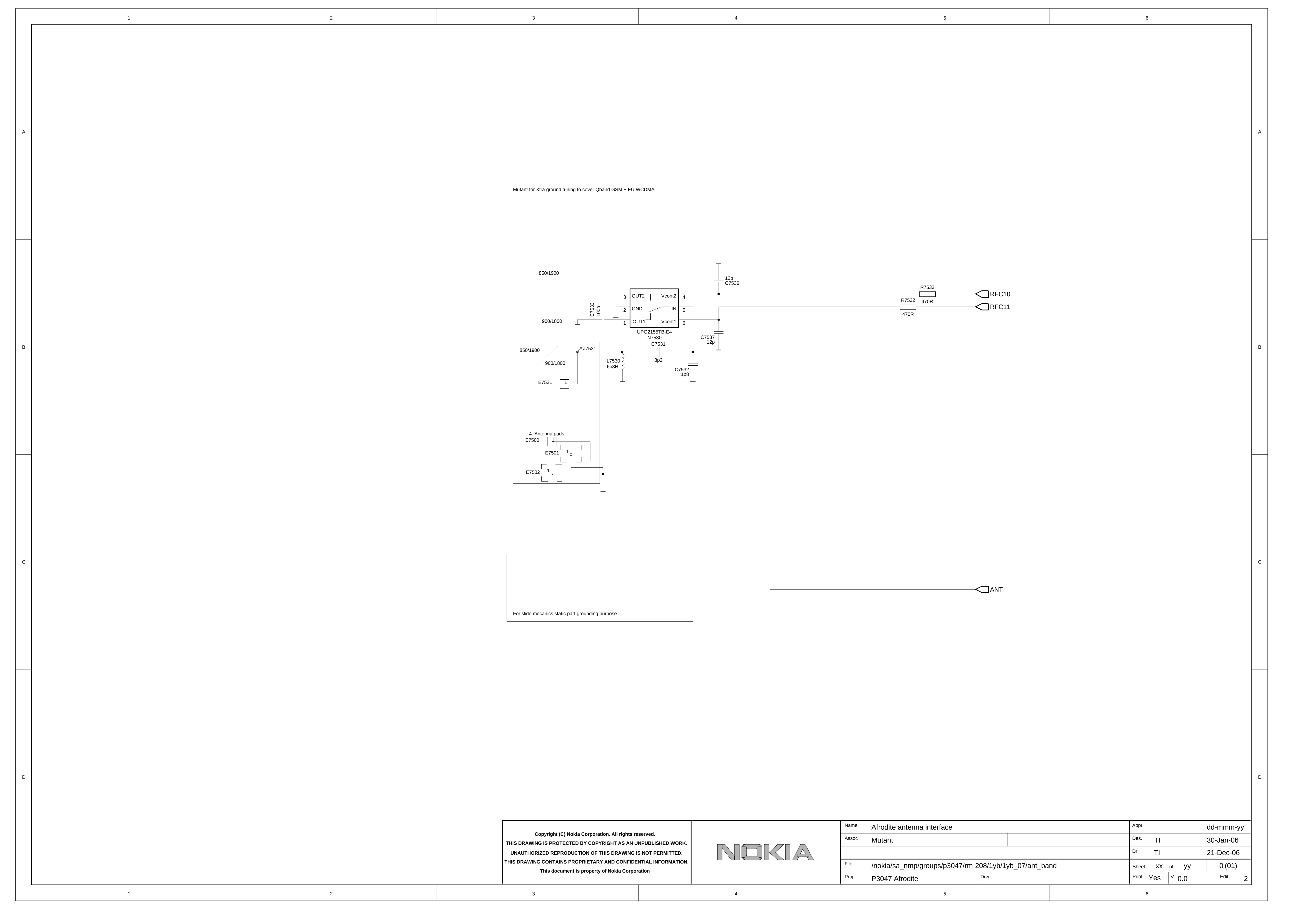
NOKIA

Name	JTAG + ETM	Appr	dd-mmm-yy
Assoc	1yb	Des. ILJARVIN	29-Aug-03
Tech	Revlon	Dr. TKOIVUSA	03-Jan-07
File	/nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ape/ape_if/emu_ape	Sheet xx of yy	1 (01)
Proj	AFRODITE Drw.	Print Yes V. 02	Edit 2

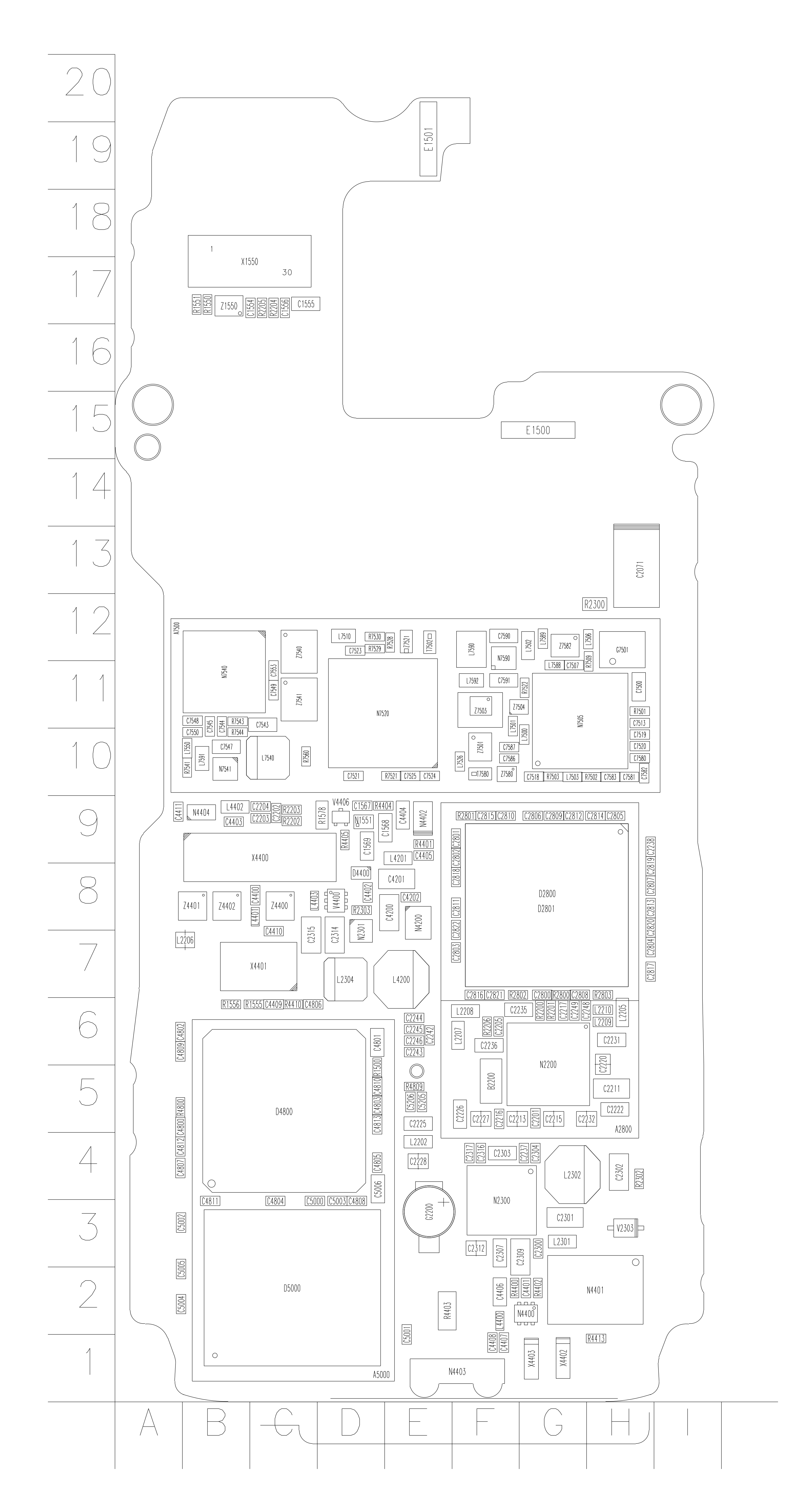

WLAN_BT(6:0)
BT CLOCK REQUEST
SYSTEM CLOCK
LPRFCLK
R6350
100R
Keep pull-downs R6351 and R6354
even if D6300 and N6302 are removed!
N6300
STLC4550
MCBSP2(3:0)
WLAN_CTRL(3:0)
PUSL(7:0)
SleepClk
WLAN(15:0)
WLAN_ResetX
V18_WLAN_DIG
V28_WLAN_RF
Mode[4:0] = 11010
for 38.4MHz
WLAN_SPI_DIN
WLAN_SPI_CSX
WLAN_IRQ
WLAN_SPI_Clk
WLAN_SPI_DOUT
WLAN_STANDBY1
WLAN_STANDBY2
WLAN_UART_SOUT
WLAN_UART_SIN
FOR_WING_ONLY
VBAT
J6314 can be moved to M4/B6 if layout easier
V18_WLAN_VCO
V12_WLAN_CORE
V18_WLAN_RF
Z6302
L=
W=0.35
WLAN UART testpoints
WLAN Gen2.5 (gen25_2 28-Oct-05)
Added TCXO and clock request logic
WLAN_CMT(6:0)
0 WLAN_SPI_Clk
1 WLAN_SPI_DIN
2 WLAN_SPI_DOUT
3 WLAN_SPI_CSX
4 WLAN_IRQ
5 WLAN_ResetX
PUSL(7:0)
0 PURX
1 SleepClk
2 RSTX
3 SleepX from Rapido
4 APE SleepX
5 SMPSClk
6 SysClk from Rapido
7 SleepX to Vilma
WLAN_BT(6:0)
0 TX_CONF
1 RFActive
2 Status
3 Frequency (NC)
4 WLAN clk request (NC)
5 BTH_CLK_REQ
6
VIO
GND PINS= GND
4396287
N6301
RF5924_ES3.5
17= GND
4396277
REFS 6300-6499
Alternate fiducial config in comp 4396277|FIDUS
Fiducials 90 degrees rotated
BT_RF
W6300
X6300
Z6300
LFB2H2G45SGFB868
2450MHz
4551081
All signals critical 50 ohm
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NOKIA
Name WLAN
Assoc
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_hw/ape/ape_if/wlan
Proj MARS
Drw.
Appr dd-mmm-yy
Des. TOMGUS 05-Nov-03
Dr. TI 30-Oct-06
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 41



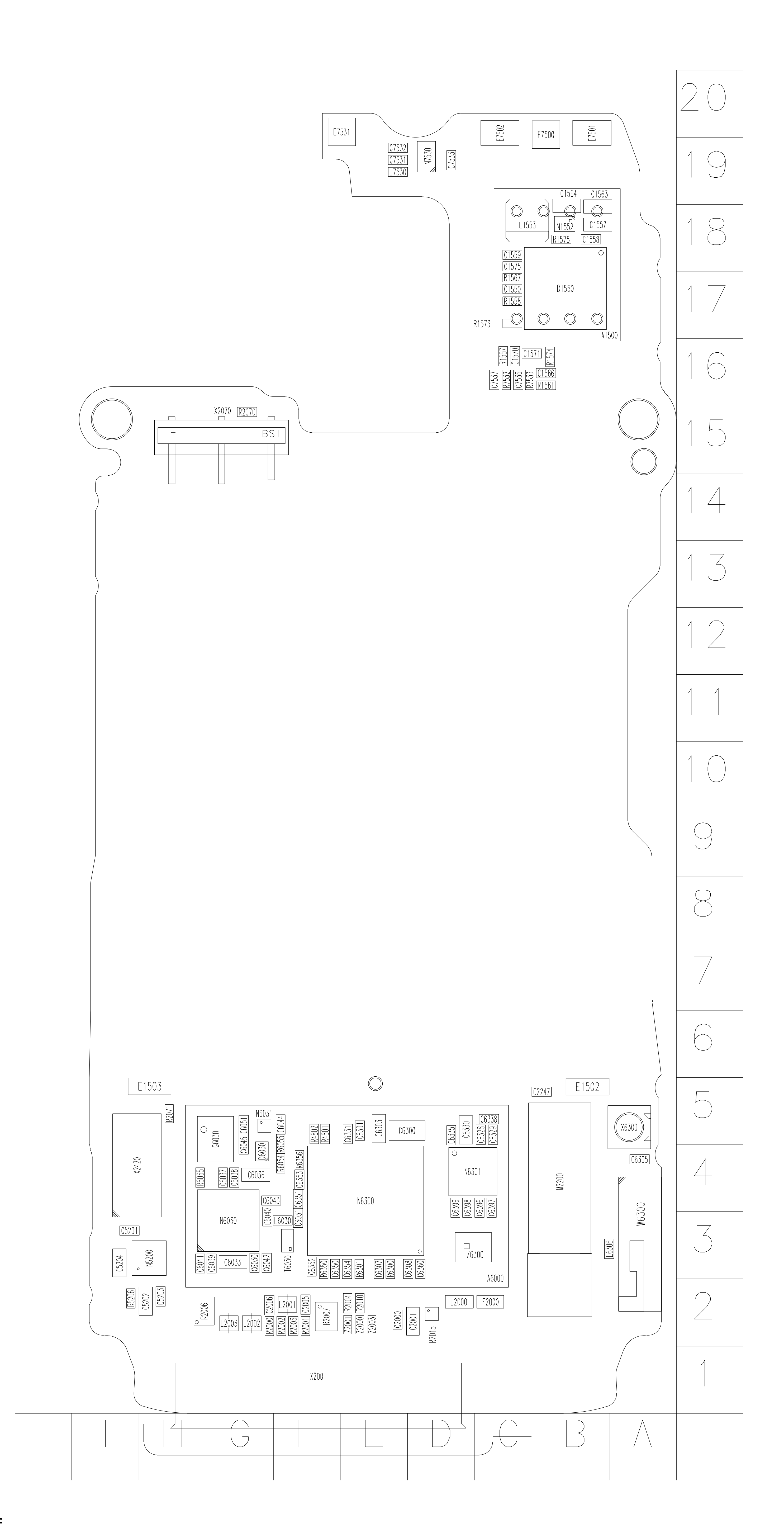
T7580
HHM1779B1
C7586
10p
C7587
10p
not_assembled
L7580
12nH
N7590
LM3202TLX_NOPB
U/U
L7590
3u3H
SW
PGND
SGND
FB
PVIN
VDD
EN
VCON
C7591
10u
L7592
28R/100MHz
E7528
VBAT
L7502
220R/100MHz
C7500
10u
C7590
10u
E7530
VCP1
E7534
VXO
C7513
4n7
N7505
AHNEUS204A
INP_2150
INN_2150
OUTP_FDD
OUTN_FDD
INP_MIX_H
INN_MIX_H
INP_1900
INN_1900
INP_1800
INN_1800
INP_900
INN_900
INP_850
INN_850
OUTP_850
OUTN_850
INP_MIX_L
INN_MIX_L
RFC1
RFC2
RFC3
RFC4
RFC5
RFC6
RFC7
RFC8
RFC9
RFC10
RFC11
MUX_IN
MUX_OUT
W_OUTP_H
W_OUTN_H
W_OUTP_L
W_OUTN_L
P_OUTP
P_OUTN
G_OUTP
G_OUTN
DET
TXC
TX_SUB
TXLOOP_SUB
TXVCO_SUB
GNDVCO
GNDVCO_RX
GNDLNA
GNDLNA2
GNDMIX
GNDPRE_RX
GNDPRE_RX2
GNDPRE_TX
GNDBB_RX
GNDBB_RX2
GNDBB_TX
GNDDIG
GNDDIG_TX
GNDVGA
GNDRF_TX
GNDCP
GNDCP_TX
THERMAL BALLS= GND
GND
VBAT_RX
VBAT_TX
VCP
VDAC
VDIG
VVCO_CAP
CBUF_CAP
VBEXT
RBEXT_RX
ENV_DET
DAC1O1
DAC1O2
DAC2O1
DAC2O2
DAC2O3
VCO_CTRL
LO_IN
OSCIN
C1IP
C1IN
C2IP
C2IN
C1QP
C1QN
C2QP
C2QN
RXOUT_PI
RXOUT_NI
RXOUT_PQ
RXOUT_NQ
TXQ_0
TXQ_180
TXI_0
TXI_180
DAC_REF1
SDATA
SCLK
XENA
XRESET
VREF_CM
REFP
REFN
REFG
DAC101
DAC102
DAC201
DAC202
DAC203
1u5
C7519
R7502
10k
1% TOLERANCE
100n
C7518
R7503
4k7
E7536
VREFRF01
R7501
10R
G7501
NKG3176D
VCC
OUT
VCONT
38.4MHz
4520105
R7509
22k
E7540
AFC
C7507
10n
1n0
C7520
C7580
100n
C7581
100n
C7582
100n
C7583
100n
E7542
RXIP
E7544
RXIN
E7546
RXQP
E7548
RXQN
E7550
TXQN
E7552
TXQP
E7554
TXIP
E7556
TXIN
E7558
DAC_REF1
E7560
RFBUSDAT
E7562
RFBUSCLK
E7564
RFBUSENA
E7566
TXRESETX
E7568
VREFCM
E7570
RFCLKP
E7572
RFCLKN
RFCLKEXT
Z7501
4511597
SAWEP1G84CM0F04
UNBAL_IN
BAL_OUT
GND
4511757
1800/1900MHz
B39941B9405K610
L7500
12nH
L7501
12nH
Z7580
SAFEL2G14CB0F40R13
IN
OUT
4511778
2140MHz
Z7504
942.5MHz
R7522
18k
RFTEMP
L7503
240R/100MHz
TXC
L7506
240R/100MHz
N7520
RF9283E4.2
Icont_low
TX1
Ident
Vcc1
ANT
RX1
RX2
RX3
RX4
Vgain
Vpd
Vdet
VC3
VC2
VC1
Icont_high
TX2
RX5
Vcc2
DAC203
C7525
10p
L7526
240R/100MHz
not_assembled
C7522
10p
C7524
27p
ANT
E53
R7560
0R
not_assembled
C7560
0p5
L7561
5n6H
C7561
1p0
R7528
10R
R7529
470R
R7530
470R
Z7521
2400-2483MHz
HHM1749K1
T7502
E7010
VBAT_PA
L7510
28R/100MHz
C7523
3p3
C7521
3p3
Z7503
4000084
LMSM32AA-422
850/900MHz
IN1
IN2
R7521
0R
R7520
18k
Z7540
DUPLEX
FILTER
SAYZZ836MBCA0F0AR15
4512286
N7540
RF3278E4.1
Out_1
VCC
Out_2
Vdet
Vreg
Vbat
Icont_h
NC/GND
VID
Icont_l
In_1
In_2
GND PINS=
C7549
8n2
C7553
1n0
DAC202
C7548
8n2
Z7541
4512317
WTXDET
E7814
R7544
0R
C7544
22n
R7543
10k
DAC201
C7550
1n0
Z7582
B39202B9315N410
836.5/1950MHz
Unbal_Out1
Unbal_Out2
Inbal1
Inbal2
4511695
L7588
12nH
L7589
6n8H
A7500
RA-6 RF SHIELD
040-035290
RFTEMP
E7526
TXC
E7506
VBAT_WPA
E7524
L7550
240R/100MHz
L7591
28R/100MHz
C7547
10u
RFC10
E51
RFC11
E52
N7541
LM3206TLX_NOPB
PVIN
VDD
EN
NC
SW
PGND
SGND
FB
4348579
L7540
3u3H
C7545
10p
DAC101
R7541
1k2
C7543
4u7
R50_15
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NOKIA
Name r50_engine
Assoc r50
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/RF5
Proj Ritsa 5.0
Dnx.
Appr dd-mmm-yy
Des. Palomaa 22-Jun-05
Dr. TI 21-Dec-06
Sheet XX of yy 0 (01)
Print Yes V. 0.0 Edit 2



Mutant for Xtra ground tuning to cover Qband GSM + EU WCDMA
850/1900
900/1800
12p
C7536
R7533
470R
RFC10
R7532
470R
RFC11
OUT2
Vcont2
GND
IN
OUT1
Vcont1
UPG2155TB-E4
N7530
C7533
100p
C7537
12p
850/1900
900/1800
J7531
C7531
8p2
L7530
6n8H
C7532
1p8
E7531
4 Antenna pads
E7500
E7501
E7502
ANT
For slide mecanics static part grounding purpose
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NOKIA
Name Afrodite antenna interface
Assoc Mutant
File /nokia/sa_nmp/groups/p3047/rm-208/1yb/1yb_07/ant_band
Proj P3047 Afrodite
Drw.
Appr dd-mmm-yy
Des. TI 30-Jan-06
Dr. TI 21-Dec-06
Sheet xx of yy 0 (01)
Print Yes V. 0.0 Edit 2



1yb_07a_asmdrw_t.pdf



20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
I
H
G
F
E
D
C
B
A
E7531
C7532
C7531
L7530
N7530
C7533
E7502
E7500
E7501
C1564
C1563
L1553
N1552
C1557
R1575
C1558
C1559
C1575
R1567
C1550
R1558
D1550
R1573
A1500
R1552
C1570
C1571
R1574
C7537
R7532
C7536
R7533
C1566
R1561
X2070
R2070
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BSI
E1503
E1502
C2247
R2071
X2420
G6030
N6031
C6045
C6051
C6044
D6030
R6065
C6037
C6038
C6036
R6054
R6055
C6043
N6030
C6040
L6030
C6031
T6030
C6041
C6039
C6033
C6030
C6042
R4802
R4801
C6331
C6301
C6303
C6300
N6300
C6352
R6350
C6351
C6353
R6356
C6335
C6330
C6338
C6328
C6329
N6301
C6399
C6398
C6396
C6397
Z6300
C6307
R6300
C6308
C6360
A6000
W2200
X6300
C6305
W6300
L6306
C5201
C5204
N5200
R5206
C5202
C5203
R2006
L2003
L2002
L2001
C2006
C2005
R2007
R2000
R2002
R2003
R2001
R2004
R2010
Z2001
Z2000
Z2003
C2000
C2001
R2015
L2000
F2000
X2001